(A free translation of the original in Portuguese)

Votorantim Industrial S.A.

Consolidated financial statements at
December 31, 2015
and report of independent auditors

Report of independent auditors on the consolidated financial statements

To the Board of Directors and Shareholders
Votorantim Industrial S.A.

We have audited the accompanying consolidated financial statements of Votorantim Industrial S.A. (the "Company") and its subsidiaries, which comprise the consolidated balance sheet as at December 31, 2015 and the consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting practices adopted in Brazil and the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Brazilian and International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error.

In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

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Votorantim Industrial S.A.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Votorantim Industrial S.A. and its subsidiaries as at December 31, 2015, and their financial performance and their cash flows for the year then ended in accordance with accounting practices adopted in Brazil and International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB).

Other matters - supplementary information

Statement of value added

We also have audited the consolidated statement of value added for the year ended December 31, 2015 which is supplementary information with respect to accounting practices adopted in Brazil and IFRS which do not require such disclosure. This statement was subject to the same audit procedures described above and, in our opinion, is fairly presented, in all material respects, in relation to the financial statements taken as a whole.

Curitiba, March 2, 2016

PRICEWATERHOUSECOOPERS
PricewaterhouseCoopers
Auditores Independentes
CRC 2SP000160/O-5

Carlos Eduardo Guaraná Mendonça
Contador CRC 1SP196994/O-2

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Votorantim Industrial S.A.

Consolidated balance sheet
As at December 31
All amounts in millions of reais

(A free translation of the original in Portuguese)

	Note	2015	2014
Assets			
Current assets			
Cash and cash equivalents	9	6,649	3,540
Financial investments	10	3,936	3,870
Derivative financial instruments	6.1.1	180	105
Trade receivables	11	2,745	2,466
Inventory	12	3,888	3,473
Taxes recoverable	13	1,376	1,086
Dividends receivable	14	42	45
Financial instruments - firm commitment	15	341	405
Other assets	16	767	467
		19,924	15,457
Assets classified as held-for-sale		414	824
		20,338	16,281
Non-current assets			
Long-term receivables			
Financial investments	10	36	19
Derivative financial instruments	6.1.1	762	197
Taxes recoverable	13	1,315	1,524
Related parties	14	3,188	2,482
Deferred income tax and social contribution	21 (b)	4,065	2,205
Judicial deposits	23 (c)	349	421
Financial instruments - firm commitment	15	627	889
Other assets	16	515	297
		10,857	8,034
Investments	17	5,174	6,270
Property, plant and equipment	18	29,276	26,037
Biological assets		81	134
Intangible assets	19	16,575	12,518
		61,963	52,993
Total assets		82,301	69,274

	Note	2015	2014
Liabilities and equity			
Current liabilities			
Borrowing	20	2,616	1,530
Derivative financial instruments	6.1.1	476	242
Trade payables		4,136	3,242
Payables - trading		126	116
Salaries and payroll charges		918	791
Income tax and social contribution		169	108
Taxes payable		333	385
Dividends payable	14	162	389
Advances from clients		242	250
Use of public assets	24	61	64
Other liabilities	22	958	624
		10,197	7,741
Liabilities related to assets held-for-sale			461
		10,197	8,202
Non-current liabilities			
Borrowing	20	27,915	22,473
Derivative financial instruments	6.1.1	2	3
Deferred income tax and social contribution	21 (b)	2,061	1,513
Related parties	14	1,216	895
Tax, civil, labor and other provision	23	2,189	1,910
Use of public assets	24	1,064	954
Pension plan		305	303
Other liabilities	22	1,354	1,310
		36,106	29,361
Total liabilities		46,303	37,563
Equity			
Share capital	25 (a)	21,419	20,363
Revenue reserves		7,436	7,279
Carrying value adjustments		2,967	586
Total equity attributable to owners of the Company		31,822	28,228
Non-controlling interests	17 (e)	4,176	3,483
Total equity		35,998	31,711
Total liabilities and equity		82,301	69,274

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated statement of income
Years ended December 31
All amounts in millions of reais unless otherwise stated (A free translation of the original in Portuguese)

	Note	2015	2014
Continuing operations			
Net revenue from products sold and services rendered	26	31,521	28,322
Cost of products sold and services rendered	27	(23,532)	(20,586)
Gross profit		7,989	7,736
Operating income (expenses)			
Selling	27	(1,835)	(1,858)
General and administrative	27	(2,272)	(2,173)
Other operating income (expenses), net	28	(817)	392
		(4,924)	(3,639)
Operating profit before equity results and finance results		3,065	4,097
Result from equity investments			
Equity in the results of investees	17	311	258
		311	258
Finance results, net	29		
Finance income		1,922	913
Finance costs		(3,205)	(3,124)
Foreign exchange losses, net		(729)	(85)
		(2,012)	(2,296)
Profit before income tax and social contribution		1,364	2,059
Income tax and social contribution	21 (a)		
Current		(714)	(531)
Deferred		(258)	149
Profit for the year from continuing operations		392	1,677
Discontinued operations			
Loss for the year from discontinued operations		(10)	(4)
Profit for the year		382	1,673
Profit attributable to the owners of the Company		387	1,588
Profit (loss) attributable to non-controlling interests		(5)	85
Profit for the year		382	1,673
Weighted average number of shares - thousands		17,936,229	17,698,165
Basic and diluted earnings per thousand shares		21.58	89.73
From continuing operations:			
Basic and diluted earnings per thousand shares, in reais		22.13	89.95
From discontinued operations:			
Basic and diluted loss per thousand shares, in reais		(0.56)	(0.23)

The accompanying notes are an integral part of these consolidated financial statements.

Votorantim Industrial S.A.

Consolidated statement of comprehensive income
Years ended December 31
All amounts in millions of reais (A free translation of the original in Portuguese)

	Note	2015	2014
Profit for the year		382	1,673
Other components of comprehensive income to be subsequently reclassified to profit or loss			
Hedge accounting for the operations of subsidiaries		28	20
Hedge accounting for net investments in foreign operations, net of income tax and social contribution	6.1.3	(3,948)	(883)
Foreign exchange gains on foreign investments		8,151	1,756
Share in other comprehensive income of investees		78	(11)
		4,309	882
Other components of comprehensive income net of income tax and social contribution that will not be reclassified to profit or loss			
Remeasurement of retirement benefits	31	25	18
Other comprehensive income for the year		4,334	900
Total comprehensive income for the year		4,716	2,573
Comprehensive income from			
Continuing operations		4,726	2,577
Discontinued operations		(10)	(4)
		4,716	2,573
Comprehensive income attributable to			
Owners of the Company		3,219	2,115
Non-controlling interests		1,497	458
		4,716	2,573

The accompanying notes are an integral part of these consolidated financial statements.

Votorantim Industrial S.A.

Statement of changes in equity
Years ended December 31
All amounts in millions of reais unless otherwise stated (A free translation of the original in Portuguese)

		Attributable to owners of the Company								
			Revenue reserves							
	Note	Share capital	Tax incentives	Legal	Profit retention	Retained earnings	Carrying value adjustments	Total	Non-controlling interests	Equity
At January 1, 2014		20,167	6	555	5,723		59	26,510	3,427	29,937
Total comprehensive income for the year										
Profit for the year						1,588		1,588	85	1,673
Components of comprehensive income for the year							527	527	373	900
Total comprehensive income for the year						1,588	527	2,115	458	2,573
Total contributions by and distributions to stockholders										
Securities convertible into shares						(68)		(68)		(68)
Capital increase		196						196		196
Acquisition of non-controlling interests - VCNNE					(38)			(38)	(100)	(138)
Increase in non-controlling interests - Yacuces									48	48
Increase in non-controlling interests - Itacamba									13	13
Reclassification from non-controlling interests to revenue reserve					294			294	(294)	
Legal reserve	25 (c)			80		(80)				
Dividends (R$ 0.04 per share)	25 (b)				(402)	(379)		(781)	(69)	(850)
Profit retention	25 (c)				1,061	(1,061)				
Total contributions by and distributions to stockholders		196		80	915	(1,588)		(397)	(402)	(799)
At December 31, 2014		20,363	6	635	6,638		586	28,228	3,483	31,711
Total comprehensive income for the year										
Profit (loss) for the year						387		387	(5)	382
Components of comprehensive income for the year							2,832	2,832	1,502	4,334
Total comprehensive income for the year						387	2,832	3,219	1,497	4,716
Total contributions by and distributions to stockholders										
Securities convertible into shares	25 (a)	936				(138)	(830)	(32)		(32)
Capital increase	25 (a)	120						120		120
Increase in non-controlling interests - Yacuces									55	55
Increase in non-controlling interests - Itacamba									53	53
Fair value of interest increase - Milpo	1 (ii)						379	379	(845)	(466)
Legal reserve	25 (c)			19		(19)				
Profit retention	25 (c)				138	(138)				
Dividends (R$ 0.01 per share)	25 (b)					(92)		(92)	(67)	(159)
Total contributions by and distributions to stockholders		1,056		19	138	(387)	(451)	375	(804)	(429)
At December 31, 2015		21,419	6	654	6,776		2,967	31,822	4,176	35,998

The accompanying notes are an integral part of these consolidated financial statements.

Votorantim Industrial S.A.

Consolidated statement of cash flows
Years ended December 31
All amounts in millions of reais (A free translation of the original in Portuguese)

	Note	2015	2014
Cash flow from operating activities			
Profit before income tax and social contribution		1,364	2,059
Loss on discontinued operations		(10)	(4)
Adjustments of items that do not represent changes in cash and cash equivalents			
Interest, indexation and foreign exchange gains		2,506	3,019
Equity in the results of investees	17 (c)	(311)	(258)
Depreciation, amortization and depletion		2,754	2,302
Loss (gain) on sale of fixed and intangible assets		(345)	(1)
Loss (gain) on sale of investments		(265)	1
Call options	28		126
Change in fair value of biological assets		44	(32)
Derivative financial instruments		(386)	(44)
Impairment provision	28	658	621
Financial instruments - firm commitment	15	326	(1,294)
Provision		151	(55)
		6,486	6,440
Decrease (increase) in assets			
Financial investments		503	618
Taxes recoverable		(81)	136
Derivative financial instruments		57	(43)
Inventory		(435)	(135)
Trade receivables		(320)	(144)
Related parties		(28)	(526)
Other receivables and assets		(33)	68
Increase (decrease) in liabilities			
Deferred revenue - performance obligation		83	905
Trade payables		854	435
Use of public assets		145	59
Salaries and payroll charges		127	33
Payables - trading		10	4
Taxes payable		(71)	(211)
Other liabilities		(122)	(287)
Cash provided by operations		7,175	7,352
Interest paid on borrowing and use of public assets		(1,876)	(1,599)
Premium paid on the Tender Offer	29	(136)	(527)
Income tax and social contribution paid		(634)	(330)
Net cash provided by operating activities		4,529	4,896
Cash flow from investing activities			
Proceeds from sale of fixed and intangible assets		328	271
Proceeds from sale of investments		285	65
Dividends received		716	56
Advances received on the sale of Sirama investment		142	
Purchases of property, plant and equipment		(3,199)	(2,438)
Increase in biological assets		(13)	(34)
Capital increase in investees		(22)	
Increase in intangible assets	19	(105)	(82)
Net cash used in investment activities		(1,868)	(2,162)
Cash flow from financing activities			
New borrowing		7,191	8,264
Repayment of borrowing		(7,548)	(9,095)
Derivative financial instruments		151	(149)
Capital increase	25 (a)	120	
Acquisition of non-controlling interests - VCNNE			(138)
Increase in non-controlling interests - Itacamba		55	13
Increase in non-controlling interests - Yacuces		53	48
Fair value of interest increase - Milpo	1 (ii)	(466)	
Interest on debentures - VFIN		(106)	(68)
Payment of dividends		(386)	(612)
Net cash used in financing activities		(936)	(1,737)
Increase in cash and cash equivalents		1,725	997
Effect of fluctuations in exchange rates		1,384	45
Cash and cash equivalents at the beginning of the period		3,540	2,498
Cash and cash equivalents at the end of the period		6,649	3,540
Main non-cash transactions			
Capital increase through ownership interests and other non-current assets	25 (a)	936	196
Transfer of assets classified as held for sale		697	
Exchange of land with the onslaught Fibria Celulose S.A.		171	
Transfer of liabilities related to assets classified as held for sale		105	
Proceeds of property, plant and equipment from sale of Baraúna		30	
Loans from FINAME for acquisition of property, plant and equipment		13	67
Payment of REFIS with deferred tax on tax losses			562

The accompanying notes are an integral part of these consolidated financial statements.

Votorantim Industrial S.A.

Consolidated statement of value added
Years ended December 31
All amounts in millions of reais (A free translation of the original in Portuguese)

	Note	2015	2014
Revenue			
Sales of products and services		37,006	33,192
Other operating income (expenses), net		(159)	1,013
Estimated loss on doubtful accounts	11 (c)	(74)	(56)
		36,773	34,149
Inputs acquired from third parties			
Raw materials and other production inputs		(19,712)	(16,815)
Materials, energy, outsourced services and others		(521)	(790)
Impairment of assets		(658)	(621)
Gross value added		15,882	15,923
Depreciation, amortization and depletion	27	(2,754)	(2,302)
Net value added generated by the Company		13,128	13,621
Value added received through transfers			
Equity in the results of investees	17	311	258
Finance income and foreign exchange gains		7,392	3,464
		7,703	3,722
Total value added to distribute		20,831	17,343
Distribution of value added			
Personnel and payroll charges	30		
Direct remuneration		2,939	2,579
Social charges		1,103	1,016
Benefits		602	492
		4,644	4,087
Taxes and contributions			
Federal		2,750	2,632
State		2,951	3,085
Municipal		25	32
Deferred taxes		258	(149)
		5,984	5,600
Third-party capital remuneration			
Finance costs and foreign exchange losses		9,404	5,760
Rentals		417	223
		9,821	5,983
Own capital remuneration			
Non-controlling interests		(5)	85
Dividends		159	850
Reinvested profits		238	742
Loss on discontinued operations		(10)	(4)
		382	1,673
Value added distributed		20,831	17,343

The accompanying notes are an integral part of these consolidated financial statements.

1 General considerations

Votorantim Industrial S.A. (the "Company", the "Parent Company", or "VID") is a privately-held company, fully controlled by the Ermírio de Moraes family, and is the holding company of the industrial companies of Votorantim Participações S.A. ("VPAR"). With its headquarters in the city of São Paulo, Brazil, the Company's purpose is to manage assets and companies, as well as to invest in other companies in order to further its objectives. The Company, through its subsidiaries and associates, operates in the following segments: basic construction materials (cement, concrete, aggregates and mortar), metals and mining (aluminum, zinc, nickel, copper, silver and lead), steel, wood pulp and electrical energy generation.

Main events that occurred during 2015

(i) Capital decrease in subsidiary Companhia Brasileira de Alumínio – "CBA"

On February 25, 2015, a reduction of the subsidiary CBA's capital by R$ 1,208 was approved, by means of transfer of the equity interest held in Votorantim Metais S.A. (R $ 439); cash and cash equivalents (R$ 585); transfer of balances of related parties (R$ 171); and transfer of other non-current assets (R$ 11) to the Company. At the Extraordinary General Meeting held on June 8, 2015, a reduction of the subsidiary's capital by R$ 290 was approved, by means of transfer of cash and cash equivalents (R$ 286) and transfer of real estate properties (R$ 4).

(ii) Capital increase in Compañia Minera Milpo S.A.A. – "Milpo"

On 15 July 2015 the subsidiary Votorantim Metais Cajamarquilla S.A. acquired, through Public Offering Acquisition, 130,975,829 shares of Milpo, which increased its stake to 59.89% of the capital. The effect on investment was R$ 845 (USD 216 million), and of this, R$ 466 (USD 118 million) was paid through own resources and R$ 379 (USD 99 million) that were recorded under "Carrying value adjustments" within shareholders' equity.

(iii) Acquisition of wind farms

On July 23, 2015 the Company, through its subsidiary Votorantim Energia Ltda., acquired 100% of the shares of Ventos de São Vicente Energias Renováveis S.A. and its subsidiaries for implementation of wind farms in Brazil's northeast region, called Wind Complex Ventos de São Vicente. The acquisition amounts to R$ 45, which was allocated to "Intangible assets" and are derived from rights to wind resources exploration for production of electrical energy.

2 Presentation of the consolidated financial statements

2.1 Basis of preparation

(a) Consolidated financial statements

The consolidated financial statements have been prepared in accordance with accounting practices adopted in Brazil effective up to December 31, 2015 , including the pronouncements issued by the Brazilian Accounting Pronouncements Committee ("CPC"), as well as according to the International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB") and their interpretations ("IFRIC"), and show all relevant own information of the financial statements, and only them, which are consistent with those used by management.

The Company voluntarily discloses its consolidated statement of value added, according to the accounting practices adopted in Brazil, applicable to public companies and presented as an integral part of these financial statements. To international practice, this statement is presented as additional information.

The preparation of consolidated financial statements considered the historical cost basis, which in the case of certain financial assets and liabilities, including derivative instruments, is adjusted to reflect the fair value measurement.

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise judgment in the process of applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in Note 4.

(b) Approval of the financial statements

The Board of Directors approved these consolidated financial statements for issue on March 2, 2016.

2.2 Consolidation

The following accounting policies are applied in the preparation of the consolidated financial statements.

(a) Subsidiaries

Subsidiaries are fully consolidated from the date on which control is transferred to the Company.

Transactions, balances and unrealized gains on transactions between companies are eliminated. Unrealized losses are also eliminated, unless the transaction provides evidence of impairment of the asset transferred. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Company.

(b) Transactions with non-controlling interests

The Company treats transactions with non-controlling interests as transactions with equity owners of the Company. For purchases from non-controlling interests, the difference between any consideration paid and the proportion acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded directly in equity, in "Profit retention reserves".

(c) Loss of control of subsidiaries

When the Company ceases to have control, any retained interest in the entity is re-measured to its fair value, with the change in carrying amount recognized in profit and loss. The amounts previously recognized in carrying value adjustments are reclassified to profit and loss.

(d) Associates and joint arrangements

Joint operations are accounted for in the financial statements in order to represent the Company's contractual rights and obligations. Therefore, the assets, liabilities, revenues and expenses related to its interests in joint operations are individually accounted for in its financial statements.

Investments in associates and joint ventures are accounted for using the equity method and are initially recognized at cost. The Company's investment in associates and joint ventures includes goodwill identified on acquisition, net of any accumulated impairment loss.

Gains and losses from dilution arising from investments in associates and joint ventures are recognized in the income statement.

All amounts in millions of reais unless otherwise stated

(e) Main companies included in the consolidated financial statements

	Percentage of total and voting capital 2015	2014	Headquarters	Main activity
Cement				
Acariúba Mineração e Participação Ltda.	100.00	100.00	Brazil	Holding
Interávia Transportes Ltda.	100.00	100.00	Brazil	Transportation
Silcar Empreendimentos, Comércio e Participações Ltda.	100.00	100.00	Brazil	Holding
Votorantim Cimentos N/NE S.A. - "VCNNE"	100.00	100.00	Brazil	Cement
Votorantim Cimentos S.A. - "VCSA"	100.00	100.00	Brazil	Cement
Votorantim Cement North America Inc. - "VCNA"	100.00	100.00	Canada	Holding
St. Barbara Cement Inc.		100.00	Canada	Cement
Votorantim Cimentos EAA Inversiones, S.L. - "VCEAA"	100.00	100.00	Spain	Holding
Votorantim Cements Internacional Spain SE		100.00	Spain	Holding
St. Marys Cement Inc.	100.00	100.00	USA	Cement
Cementos Artigas S.A. - "Artigas"	51.00	51.00	Uruguay	Cement
Aluminum				
Companhia Brasileira de Alumínio - "CBA"	100.00	100.00	Brazil	Aluminum
Nickel				
Votorantim Metais S.A. - "VMSA"	100.00	100.00	Brazil	Nickel
Zinc and byproducts				
Votorantim Metais Zinco S.A. - "VMZ"	100.00	100.00	Brazil	Zinc
Votorantim Investimentos Latino-Americanos S.A. - "VILA"	100.00	99.91	Brazil	Holding
US Zinc Corporation - "USZinc"	100.00	100.00	USA	Zinc
VM Holding S.A. - "VM Holding"	100.00	100.00	Luxembourg	Holding
Votorantim Metais Cajamarquilla S.A. - "Cajamarquilla"	99.91	99.91	Peru	Zinc
Compañia Minera Atacocha S.A.A.	88.19	88.19	Peru	Mining
Compañia Minera Milpo S.A.A. - "Milpo"	60.06	50.06	Peru	Mining
Steel				
Acerbrag S.A.	100.00	100.00	Argentina	Steel
Votorantim Siderurgia S.A. - "VS"	100.00	100.00	Brazil	Steel
Acerías Paz del Río S.A. - "APDR"	82.42	82.42	Colombia	Steel
Holding, trading and other companies				
Votorantim GmbH - "VGmbH"	100.00	100.00	Austria	Trading
Votorantim FinCO GmbH - "Finco"	100.00		Austria	Trading
Santa Cruz Geração de Energia S.A.	100.00	100.00	Brazil	Electric power
Votener - Votorantim Comercializadora de Energia Ltda.	100.00	100.00	Brazil	Electric power
Votorantim Energia Ltda. - "VE"	100.00	100.00	Brazil	Holding
Ventos de São Vicente Energias Renováveis S.A.	100.00		Brazil	Holding
Votorantim RE	100.00		Brazil	Insurance
Votorantim Geração de Energia S.A.	100.00		Brazil	Holding
Votorantim Novos Negocios Ltda. "VNN"	100.00	100.00	Brazil	Holding
Joint operations				
Campos Novos Energia S.A.	44.76	44.76	Brazil	Electric power
Baesa - Energética Barra Grande S.A.	15.00	15.00	Brazil	Electric power
Voto - Votorantim Overseas Trading Operations IV Ltd.	50.00	50.00	Cayman Islands	Holding
Exclusive investment funds (i)				
Fundo de Investimento Pentágono Multimercado - Crédito Privado	100.00	100.00	Brazil	Finance
Odessa Multimercado Crédito Privado	61.17	89.94	Brazil	Finance

(i) Due to the nature of the exclusive funds, they do not feature voting capital. The Company holds the total capital mentioned. Ownership interests in exclusive investment funds were consolidated in accordance with the segregation of the investments that make up the net assets of these funds.

2.3 Foreign currency translation

(a) Functional and presentation currency of the financial statements

The functional currency of the Company is the Brazilian Real ("R$", "Real" or "reais").

(b) Transactions and balances

Foreign currency transactions are translated into reais using the exchange rates prevailing at the dates of the transactions or the dates of valuation when items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the statement of income, except when deferred in equity as net investment hedges.

(c) Subsidiaries with a different functional currency

The results and financial positions of all the Company entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

(i) assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;

(ii) income and expenses for each statement of income are translated at average exchange rates; and

(iii) all resulting exchange differences are recognized as a separate component of equity, in "Carrying value adjustments".

The amounts presented in the cash flow are extracted from the translated movements of the assets, liabilities and profit or loss, as detailed above.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations, and of borrowings and other foreign currency instruments designated as hedges of such investments, are taken to equity. When a foreign operation is partially disposed of or sold, exchange differences that were recorded in equity are recognized in the statement of income as part of the gain or loss on sale.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

Below are the functional currencies defined for the significant foreign subsidiaries:

Company	Country	Functional currency	Main activity
VCNA	Canada	Canadian Dollar	Cement
VCEAA	Spain	Euro	Cement
Cajamarquilla	Peru	US Dollar	Metals
USZinc	USA	US Dollar	Metals
Milpo	Peru	US Dollar	Mining
APDR	Colombia	Colombian Peso	Steel
Acerbrag	Argentina	Argentine Peso	Steel
VM Holding	Luxembourg	US Dollar	Holding
VGmbH	Austria	US Dollar	Trading
FinCO	Austria	US Dollar	Trading

2.4 Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits with banks and other short-term highly liquid investments with original maturities of three months or less, which are readily convertible into a known amount of cash and subject to immaterial risk of change in value.

2.5 Financial assets

2.5.1 Classification, recognition and measurement

The Company and its subsidiaries classify their financial assets in the following categories: at fair value through profit or loss ("held for trading"), held to maturity, loans and receivables and available for sale. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of financial assets upon initial recognition.

(a) Held for trading

These are financial assets held for active and frequent trading. These assets are measured at their fair value, and the changes are recognized in the statement of income for the year within "Finance results, net". All financial assets in this category are classified as current assets.

The cash equivalents are classified in this category. In practice, the fair value and amortized cost are equal by definition considering the characteristics ofn these cash equivalents.

Derivatives are also categorized as held for trading unless they are designated as hedges.

(b) Held to maturity

Investments in non-derivative marketable securities, made by the Company with the ability and intention of being held to maturity, are classified as held to maturity investments and recorded at amortized cost. The Company assesses, at the balance sheet date, whether there is objective evidence that a financial asset or group of financial assets is impaired. If there is such evidence, a provision for the impairment of the asset is recorded.

(c) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. The Company's loans and receivables mainly comprise "Trade receivables" and "Cash and cash equivalents".

(d) Financial assets available-for-sale

Financial assets available-for-sale are non-derivatives that are either designated in this category or not classified in any of the previous categories. They are presented as non-current assets unless management intends to dispose of the investment within 12 months after the balance sheet date.

2.5.2 Impairment of financial assets carried at amortized cost

The amount of any impairment loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced and the amount of the loss is recognized in the statement of income.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized (such as an improvement in the debtor's credit rating), the reversal of the previously recorded loss is recognized in the statement of income.

2.6 Derivative financial instruments and hedging activities

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, in the case of adoption of hedge accounting, and if so, the nature of the item being hedged. The Company adopts the hedge accounting procedure and designates certain derivatives as either:

- hedges of the fair value of recognized assets or liabilities or a firm commitment (fair value hedge);
- hedges of a particular risk associated with a recognized asset or liability or a highly probable forecast transaction (cash flow hedge); or
- hedges of a net investment in a foreign operation (net investment hedge).

The Company documents at the inception of the transaction the relationship between the hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions.

(a) Cash flow hedge

With a view to ensuring a fixed operating margin in reais for a portion of the production of the metal businesses, the subsidiaries enter into commodity forward contracts (zinc, aluminum and nickel) on sales of certain commodities combined with the sale of U.S. Dollar forward contracts. These subsidiaries adopt hedge accounting for the derivative instruments entered into for this purpose. The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in equity within "Carrying value adjustments". The gain or loss relating to the ineffective portion is recognized as other operating income (expenses). The amounts recognized in equity are recorded in the statement of income (in the same line item affected by the transaction originally hedged) upon realization of the hedged exports and/or sales referenced to the London Metal Exchange ("LME") prices.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognized in profit or loss only when the transaction is recognized in the statement of income. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the statement of income within "Other operating income (expenses), net".

The Company also adopts hedge accounting for London Interbank Offered Rate (“LIBOR”) derivative instruments, which are used to hedge the interest rate risk on borrowing indexed to LIBOR. The effective portion of changes in the fair value of these derivatives is recognized in equity within "Carrying value adjustments" and recorded in the statement of income upon repayment of the borrowing.

(b) Fair value hedges

With the objective of maintaining the flow of the metal businesses' operating revenue pegged to LME prices, the subsidiaries enter into hedging transactions under which they convert sales at fixed prices to floating prices in commercial transactions with customers interested in purchasing products at a fixed price. These subsidiaries adopt hedge accounting for the derivative instruments entered into for this purpose. Changes in the fair values of derivatives that are designated and qualify as fair value hedges are recorded in "Operating income (expenses)". The change in the fair value of the hedged item, in this case the firm commitment of the fixed price sale to the customer, is recorded in "Operating income (expenses)".

(c) Net investment hedges

Hedges of net investments in foreign operations are accounted for in a similar manner to cash flow hedges.

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognized in "Carrying value adjustments". The gain or loss relating to the ineffective portion is recognized immediately in income. Gains and losses accumulated in equity are included in the statement of income when the foreign operation is partially or fully disposed of or sold.

(d) Derivatives carried at fair value through profit or loss

Certain derivative instruments do not qualify for hedge accounting. Changes in the fair values of any of these derivative instruments are recognized immediately in the statement of income within "Other operating income (expenses), net". Instruments not qualifying as hedges that are intended to hedge fluctuations in interest rates are classified in "Finance results, net".

(e) Financial instrument – firm commitment

The subsidiary Votener - Votorantim Comercializadora de Energia Ltda. centralizes the energy purchase and sale transactions to meet the demands of VID companies. Part of these transactions is carried out under contracts that have been entered into and continue to be performed for the purpose of receiving or delivering energy for own use, according to the production demands of VID companies and, therefore, do not meet the definition of financial instrument.

Another portion of these transactions refers to the purchase and sale of surplus energy, not used in VID's production process and which is, therefore, sold in an active market and meets the definition of financial instrument because such instruments are settled in energy readily convertible into cash. These contracts are accounted for as derivatives pursuant to IAS 39/CPC 38 and are recognized in the Company's balance sheet at fair value on the date the derivative is entered into and re-measured at fair value at the end of the reporting period.

The fair value of such derivative is estimated partly based on price quotations published in an active market, to the extent that observable market inputs exist, and partly by using valuation techniques, the inputs of which include data that is not based on or derived from observable market inputs. (i) prices set in purchase and sale transactions, (ii) risk margin in the supply and (iii) market price projected in the availability period. Whenever the fair value at the initial recognition of these contracts differs from the transaction price a fair value gain or a fair value loss arises.

2.7 Trade receivables

Trade receivables are amounts due from customers for merchandise sold or services performed in the ordinary course of the Company's business.

Trade receivables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest rate method, less provision for impairment of trade receivables. Receivables from customers abroad are presented based on the exchange rates prevailing at the balance sheet date.

2.8 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the weighted average cost method. The cost of finished goods and work in progress comprises raw materials, direct labor, other direct costs and related production overheads. Raw materials derived from biological assets are measured at fair value, less estimated point-of-sale costs at the point of harvest, when they are transferred to inventories in non-current assets. Net realizable value is the estimated selling price in the ordinary course of business, less conclusion costs and selling expenses. Imports in transit are stated at the accumulated cost of each import.

2.9 Current and deferred income tax and social contribution

The income tax and social contribution expense for the period comprises current and deferred taxes. Taxes on profit are recognized in the statement of income, except to the extent that they relate to items recognized directly in equity. In such cases, the taxes are also recognized in comprehensive income or directly in equity. The current and deferred income tax and social contribution is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the entities operate and generate taxable income. Management periodically evaluates positions taken by the Company in income tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provision where appropriate on the basis of amounts expected to be paid to the tax authorities.

The current income tax and social contribution are presented net, separated by taxpaying entity, in liabilities when there are amounts payable, or in assets when the amounts prepaid exceed the total amount due on the reporting date.

Deferred tax assets are recognized only to the extent it is probable that future taxable profit will be available against which the temporary differences and/or tax losses can be utilized.

Deferred income tax assets and liabilities are presented net in the balance sheet when there is a legal right and the intention to offset them upon the calculation of current taxes, generally related to the same legal entity and the same taxation authority. Thus, deferred tax assets and liabilities in different entities or in different countries are presented separately, and not net.

2.10 Judicial deposits

Judicial deposits are monetarily restated and presented net in "tax, civil, labor and other provision", when there is a corresponding provision. The deposits without corresponding provision are presented in non-current assets.

2.11 Property, plant and equipment

Property, plant and equipment are stated at their historical cost of acquisition or construction, less accumulated depreciation. Historical cost also includes finance costs related to the acquisition or construction of qualifying assets.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with these costs will flow to the Company and they can be measured reliably. The carrying amount of the replaced items or parts is derecognized.

All other repairs and maintenance are charged to the statement of income during the financial period in which they are incurred. The cost of major refurbishments is included in the carrying value of the asset when future economic benefits exceed the performance initially expected for the existing asset. Refurbishment expenses are depreciated over the remaining useful life of the related asset.

Land is not depreciated. Depreciation of other assets is calculated using the straight-line method to reduce their cost to their residual values over their estimated useful lives, as mentioned in Note 18.

An asset's carrying amount is written down immediately to its recoverable amount when the asset's carrying amount is greater than its estimated recoverable amount, in accordance with the criteria adopted by the Company in order to determine the recoverable amount.

Gains and losses on disposals are determined by comparing the sales amount with the carrying amount and are recognized within "Other operating income (expenses), net" in the statement of income.

2.12 Leases

Leases of property, plant and equipment under which the Company has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalized at the inception of the lease at the lower of the fair value of the leased item and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges. The corresponding rental obligations, net of finance charges, are included in other payables.

The interest element of the finance cost is charged to the statement of income over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases are depreciated over the useful life of the asset.

2.13 Assets classified as held-for-sale

Assets (or disposal groups) are classified as assets held-for-sale when their carrying amount is to be recovered principally through a sale transaction and the sale is considered highly probable. These assets are stated at the lower of their carrying amount and fair value, less costs to sell.

2.14 Intangible assets

(a) Goodwill

Goodwill represents the excess of the cost of an acquisition over the net fair value of assets and liabilities of the acquired entity. Goodwill on acquisitions of subsidiaries is recorded as "Intangible assets" in the consolidated financial statements. Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

Goodwill is allocated to Cash-Generating Units ("CGUs") for the purpose of impairment testing. The allocation is made to those CGUs or groups of CGUs that are expected to benefit from the business combination in which the goodwill arose.

(b) Rights over natural resources

Costs for the acquisition of rights to explore and develop mineral properties are capitalized and amortized using the straight-line method over their useful lives, or, when applicable, based on the depletion of the mines in question.

Once the mine is operational, these costs are amortized and considered a cost of production.

Depletion of mineral resources is calculated based on extraction, taking into consideration the estimated productive lives of the reserves.

(c) Computer software

Computer software licenses and development costs directly attributable to software are recorded as intangible assets. These costs are amortized over the estimated useful life of the software (three to five years).

Costs associated with maintaining computer software programs are recognized as an expense as incurred.

(d) Use of public assets

This represent the amounts established in the concession contracts regarding the rights to hydroelectric power generation (onerous concession) under Use of Public Assets agreements.

These transactions are accounted for at the time when the operating permit is awarded, regardless of the disbursement schedule established in the contract. Upon inception, this liability (obligation) and intangible asset (concession right) correspond to the total amount of the future obligations discounted to their present value.

The amortization of the intangible asset is calculated on a straight-line basis over the period of the authorization to use the public asset. The financial liability is updated by the effective interest method and reduced by the payments contracted.

(e) Contractual customer relationships and non-competition agreements

Contractual customer relationships and non-competition agreements acquired in a business combination are recognized at fair value at the acquisition date. The contractual customer relations and non-competition agreements have a finite useful life and are carried at cost less accumulated amortization. Amortization is calculated using the straight-line method over the estimated useful lives as follows:

Customer relationships	Eight years
Non-competition agreements	Five years

2.15 Business combination and goodwill based on expected future profitability

The Company applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred and the equity interests issued by the Company. The consideration transferred includes the fair value of assets or liabilities resulting from a contingent consideration arrangement, when applicable. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The Company recognizes any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the fair value of the acquiree's identifiable net assets. Non-controlling interests are determined on each acquisition.

2.16 Impairment of non-financial assets

Assets that have an indefinite useful life, for example goodwill, are not subject to amortization and are tested annually for impairment.

Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized when the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and its value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (CGUs). Non-financial assets other than goodwill that were adjusted due to impairment are subsequently reviewed for possible reversal of the impairment at the balance sheet date.

2.17 Trade payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business. Trade payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest rate method.

2.18 Borrowings

Borrowings are initially recognized at fair value, net of transaction costs incurred, and subsequently carried at amortized cost. Any difference between the proceeds (net of transaction costs) and the total amount payable is recognized in the statement of income over the period of the borrowings using the effective interest rate method.

Borrowing costs directly related to the acquisition, construction or production of a qualifying asset that requires a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of that asset when it is probable that future economic benefits associated with the item will flow to the Company and costs can be measured reliably. The other borrowing costs are recognized as finance costs in the period in which they are incurred.

2.19 Provision

(a) Provision for tax, civil, labor, environmental and other legal claims

The provision for tax, civil, labor, environmental and other legal claims is recognized when: (i) the Company has a present legal or constructive obligation as a result of past events, (ii) it is probable that an outflow of resources will be required to settle the obligation, and (iii) the amount can be reliably estimated. Provision does not include future operating losses.

Provision is measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to time elapsing is recognized as interest expense.

(b) Asset retirement obligations

Expenditures relating to mine retirement are recorded as asset retirement obligations. Obligations consist mainly of costs associated with termination of activities. The asset retirement cost, equivalent to the present value of the obligation (liability), is capitalized as part of the carrying amount of the asset, which is depreciated over its useful life. These liabilities are recorded as provision.

2.20 Employee benefits

The Company operates certain types of post-employment benefits, including both defined benefit and defined contribution plans and a post-retirement healthcare plan.

(a) Pension obligations

The Company, through its subsidiaries abroad (VCNA, VCEAA, Artigas and APDR) and in Brazil (VCNNE), participates in pension plans managed by a private pension entity, which provide post-employment benefits to employees.

The liability recognized in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date minus the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market interest rates that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension obligation. In countries where there is no active market related to such obligations, market rates for government securities are used.

Actuarial gains and losses arising from changes in actuarial assumptions are recognized within "Carrying value adjustments" in the period in which they arise.

Past-service costs are recognized immediately in the statement of income, unless the changes to the pension plan are conditional on the employees remaining in service for a specified period of time (the vesting period). In this case, past-service costs are amortized on a straight-line basis over the vesting period.

For defined contribution plans, the Company pays contributions to the pension plan administrators on a compulsory, contractual or voluntary basis. The Company no longer has payment obligations once the contributions are paid. Contributions are recognized as employee benefit expense when due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

(b) Health care (post-retirement)

The liability related to the health care plan for retired employees is stated at the present value of the obligation, less the market value of the plan assets, adjusted by actuarial gains and losses and past-service costs, in a manner similar to the accounting methodology used for defined benefit pension plans. The post-retirement health care obligation is calculated annually by independent actuaries. The present value of the post-retirement health care obligation is determined based on an estimate of the future cash outflow.

Actuarial gains and losses arising from changes in actuarial assumptions are fully recognized within "Carrying value adjustments" in the period in which they arise.

(c) Employee profit sharing

Provision is recorded to recognize the expenses related to employee profit sharing. This provision is calculated based on qualitative and quantitative targets established by management and recorded in the statement of income as "Employee benefits".

2.21 Share capital

Share capital is represented exclusively by common shares classified as equity.

2.22 Revenue recognition

Revenue is shown net of value added tax, returns, rebates and discounts, after eliminating sales within the consolidated companies.

(a) Sales of products and services

The Company and its subsidiaries recognize revenue when: (i) the amount of revenue can be reliably measured; (ii) it is probable that future economic benefits will flow to the entity; and (iii) specific criteria have been met for each of the activities of the Company and its subsidiaries as described below. Revenue will not be deemed as reliably measured if all sale conditions are not resolved. The Company and its subsidiaries base their estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

(b) Sale of surplus energy

The electric energy purchase and sale transactions entered into by the Company and its subsidiaries that have the purpose of purchase of energy for own consumption or supply of own generation energy do not meet the definition of financial instrument. The other energy purchase and sale transactions are recognized in the Company’s financial statements at their fair value.

(c) Interest income

Interest income arising from financial assets is recognized on an accrual basis, using the effective interest rate method.

2.23 Distribution of dividends

The distribution of dividends to the Company's stockholders is recognized as a liability in the Company's financial statements at year-end based on the Company's bylaws. Any amount that exceeds the minimum required, 25% of the profit for the year, is only provided on the date it is approved by the stockholders at the General Meeting.

2.24 Earnings per share

Earnings per share are calculated by dividing the profit attributable to the controlling stockholders by the weighted average number of common shares outstanding during the year. The weighted average number of shares is calculated based on the periods in which the shares were outstanding.

2.25 Government grants

Government grants are recorded at fair value when there is a reasonable guarantee that the grant will be received and the Company will be able to comply with all of the required conditions.

Government grants related to costs are deferred and recorded in the statement of income during the period required to reconcile them with the costs that they are intended to offset.

3 Changes in accounting policies and disclosures

(a) Change of applicable standards beginning on January 1, 2015

The following changes in standards were adopted for the first time on the fiscal year that began on January 1, 2015, and did not have any considerable impact for the Company and its subsidiaries.

(i) Defined benefits plans (Amendments to IAS 19 – employee benefits)

These changes allow for the employee's and third party's contributions to be recognized as a cost reduction for the services, subject to the determined conditions. The objective of these changes is to simplify the accounting treatment of contributions that do not depend on the employee's years of service as, for example, employee contributions that are calculated based on a fixed percentage of the salary.

(ii) CPC 05/IAS 24 – Related parties

- Entities that provide administration services equivalent to key-administration are also considered related parties.
- The reporting entity must disclose the expenses paid to this related party.

(iii) CPC 15/IFRS 3 – Business combinations

- Elimination of conflicts between financial instruments accounting standards and business combinations accounting standards.
- Contingent payment is a financial liability or a property instrument.
- The re-measurement must be done at fair value, when it is not an equity instrument.
- Eliminates references to other statements, such as IAS 37, which refer to the remeasurement of contingent consideration.
- Clarification of exceptions to the standard's scope.

(iv) **CPC 46/IFRS 13 – Fair value measurement**

- Clarifies that short-term financial assets without explicit interest to the present value are eliminated from fair value measurement when its effects are immaterial.
- Includes the concept of present value techniques.
- Clarifies that the list of exceptions defined by IRFS 13 applies to all contracts that fall within the scope of IAS 39 and IFRS 9.

The administration evaluated and concluded that the main changes in accounting standards did not materially impact the Financial Statements.

(b) New standards not yet adopted

The following standards have been published and are mandatory for subsequent accounting periods, starting from January 1, 2018. There was no early adoption of these standards by the Company.

(i) **IFRS 9 - "Financial instruments: recognition and measurement"**

This new standard addresses the classification, measurement and recognition of financial assets and financial liabilities.

IFRS 9 has the ultimate objective of superseding IAS 39 – “Financial instruments: recognition and measurement”. This standard is effective from January 1, 2018. Management is assessing the impact of its adoption.

(ii) **IFRS 15 – “Revenue from contracts with customers”**

This new standard prescribes the principles that an entity should apply to measure contract revenue and determine when it should be recognized. It will become effective in 2017, and supersedes IAS 11 – “Construction contracts” and IAS 18 – (CPC 30) “Revenue and related interpretations”. At the meeting on April 28, 2015, the IASB decided to delay the effective date to January 1, 2018. Management is assessing the impact of the adoption of this standard.

(iii) **IFRS 16 - "Leases”**

This standard replaces IAS 17 – (CPC 06 (R1)) - “Leases” and corresponding interpretations. This standard is effective for years beginning on or after January 1, 2019. Management is yet to assess IFRS 16's full impact.

The CPC has not yet issued the equivalent new or revised standards in accordance with accounting practices adopted in Brazil, and these new or revised standards are still subject to approval by the relevant regulatory authorities. In general, the early adoption of new or revised standards and interpretations, although encouraged by the IASB, is not available in the accounting practices adopted in Brazil. Therefore, these new or revised standards are not included in these financial statements of the Company.

There are no other IFRSs or IFRIC interpretations that are not yet effective that would be expected to have a material impact on the Company’s financial statements.

4 Critical accounting estimates and judgments

Based on assumptions, the Company makes estimates concerning the future. The resulting accounting estimates and judgments are continually reviewed and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The accounting estimates will seldom match the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below:

(a) Business combinations

In a business combination, the identifiable assets acquired and liabilities assumed are measured at fair value on the acquisition date. The non-controlling interest in the company acquired is valued at the fair value of the business or at the relevant portion of value of the company's net identifiable assets. The measurement of these assets and liabilities, on the acquisition date, is subject to fair value analysis, including estimates of future cash flow, fair value, credit risk and others, and could be significantly different from actual results.

(b) Fair value of derivatives and other financial instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Company uses judgment to select among a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period (Note 6.1.1).

(c) Asset retirement obligations

The Company recognizes an obligation based on the fair value of the asset retirement operations in the period in which they occur, against the respective intangible asset. The Company considers the accounting estimates related to the recovery of degraded areas and the costs to close a mine as a critical accounting practice since it involves significant provision amounts and these estimates involve various assumptions such as interest rates, inflation and the useful life of the asset, considering the current depletion stage, the costs involved and the dates established for the depletion of each mine. These estimates are reviewed annually by the Company.

(d) Deferred income tax and social contribution

The Company is subject to income taxes in all countries in which it operates. The provision for income tax is calculated individually by the entity based on tax rates and rules effective at the entity's location. The Company also recognizes liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will have an impact on the current and deferred tax assets and liabilities in the period in which the determination is made (Note 21).

(e) Non- current assets and review of the useful lives of property, plant and equipment and intangible assets

The Company and its subsidiaries review the assets used in their activities for possible impairment whenever events or changes in circumstances indicate that the carrying value of an asset or group of assets may not be recoverable on the basis of undiscounted future cash flow. If the carrying amount of these assets exceeds their recoverable amount, the net value and useful life are adjusted to reflect the new thresholds.

(f) Provision for tax, civil, labor and other legal claims

The Company is a party to tax, civil, labor and other legal claims in progress at different court levels. Provision against potentially unfavorable outcomes of litigation in progress is established and updated based on management evaluation, as supported by external legal counsel, and requires a high level of judgment regarding the matters involved.

(g) Impairment of goodwill and investments

The Company tests annually whether goodwill has suffered any impairment, in accordance with its accounting policy (Note 2.5.2). The recoverable amounts of CGUs have been determined based on value-in-use calculations. These calculations require the use of estimates.

For the recoverable amount of its investments, the Company applies a similar procedure to impairment testing of goodwill.

Additional information is disclosed in Note 19 (c).

(h) Use of public assets

The amount is originally recognized as a financial liability (obligation) and as an intangible asset (right to use a public asset) which corresponds to the amount of the total annual charges over the period of the agreement discounted to present value (present value of the future payment cash flows).

(i) Recognition of estimated loss for doubtful accounts

The estimated loss for doubtful accounts is recognized in an amount considered sufficient to cover probable losses on their realization. The Company's accounting policy for establishing the estimated loss requires that all invoices be individually reviewed by the legal, collection and credit departments, in order to determine the amount of the probable expected losses.

5 Social and environmental risk management

The Company, through its subsidiaries and associates, operates in various segments and consequently, these activities are subject to several Brazilian and international environmental laws, regulations, treaties and conventions, including those that regulate the discharge of materials into the environment, which establish the removal and cleaning of the contaminated environment, or those relating to environmental protection. The violations of the environmental regulations in force expose the violator(s) to significant fines and monetary penalties, and may require technical measures or investments to ensure the compliance with the mandatory emissions levels.

The Company carries out periodic studies to identify any potentially affected areas and records, based on the best estimates of costs, the amounts expected to be disbursed for the investigation, treatment and cleaning of the potentially affected areas.

The Company and its subsidiaries believe they are in compliance with all of the applicable environmental standards in the countries in which they operate.

All amounts in millions of reais unless otherwise stated

6 Financial risk management

6.1 Financial risk factors

The activities of the Company and its subsidiaries expose them to a variety of financial risks, namely: (a) market risk (including currency, commodity price and interest rate risk), (b) credit risk and (c) liquidity risk.

A significant portion of the products sold by the Company and its subsidiaries, such as aluminum, nickel and zinc are commodities, with prices pegged to international indexes and denominated in U S Dollars. Their costs, however, are mainly denominated in reais, and therefore, there is a mismatch of currencies between revenues and costs. Additionally, the Company and its subsidiaries have debts linked to different indexes and currencies, which may have an impact on their cash flow.

In order to mitigate the various effects of each market risk factor, the Company and its subsidiaries follow a Market Risk Management Policy, approved by the Finance Committee, with the objective of establishing governance and the overall guidelines of the process of managing these risks, as well as the metrics for their measurement and monitoring.

This policy is complemented by establishing guidelines and rules for: (i) foreign exchange exposure management, (ii) interest rate exposure management, (iii) commodity price exposure management, (iv) counterparty and issuer risk management, and (v) liquidity and financial indebtedness management. The proposals made to comply with each of the policies are discussed and approved by the Finance Committee, pursuant to the governance structure described in the Market Risk Management Policy.

The following financial instruments may be taken out in order to mitigate and manage risk: conventional swaps, call options, put options, collars, currency futures contracts and Non-Deliverable Forward contracts. Strategies that include simultaneous purchases and sales of options are authorized only when they do not result in a net short position in volatility of the underlying asset. The Company does not enter into transactions involving financial instruments for speculative purposes.

(a) Market risk

(i) Foreign Exchange risk

The Foreign Exchange Exposure Management Policy highlights that the purpose of derivative transactions is to reduce cash flow volatility, hedge against foreign exchange exposure, and avoid the mismatch between Company currencies.

The Company has certain investments in foreign operations, the net assets of which are exposed to foreign exchange risk. Foreign exchange exposure arising from the Company’s foreign operations is mainly hedged by borrowings in the same currency of these investments, being classified as net investment hedges, as described in Note 2.6. We present below the carrying amounts of assets and liabilities indexed to foreign currency at the end of the reporting period:

		Current		Non-current	
	Note	2015	2014	2015	2014
Assets in foreign currency					
Cash and cash equivalents	9	3,838	2,201		
Financial investments	10	1,035	1,048		
Derivative financial instruments		180	105	762	197
Trade receivables	11	1,680	1,429		
		6,733	4,783	762	197
Liabilities in foreign currency					
Borrowing	20 (a)	1,133	586	21,312	14,376
Derivative financial instruments		471	235		
Trade payables		2,898	2,035	25	19
		4,502	2,856	21,337	14,395
Net exposure		2,231	1,927	(20,575)	(14,198)

(ii) Cash flow and fair value interest rate risk

The Company's interest rate risk arises from long-term borrowing. Borrowing at variable rates exposes the Company to cash flow interest rate risk. Borrowing at fixed rates exposes the Company to fair value interest rate risk.

The Interest Rate Exposure Management Policy establishes guidelines and rules for mitigating risks of fluctuations in interest rates that have an impact on the cash flow of the Company and its BUs. Based on the exposure to each interest rate index (mainly the CDI, LIBOR and TJLP), the Finance Committee approves proposals for entering into hedge transactions.

(iii) Commodity price risk

The Commodity Price Exposure Management Policy establishes guidelines to mitigate the risk of fluctuations in commodity prices that have an impact on the cash flow of the Company's operating subsidiaries.

The exposure to each commodity price considers the monthly projections of production, purchases of inputs and flows of maturities of the related hedges. Hedge transactions are classified into the following categories:

- Fixed-price commercial transactions - hedge transactions that switch, from fixed to floating, the price contracted in commercial transactions with customers interested in purchasing products at a fixed price;
- Hedges for "quotation periods" - hedges that set a price for the different "quotation periods" between the purchases of certain inputs (metal concentrate) and the sale of products arising from the processing of these inputs;
- Hedges for "costs of inputs" - intended to ensure protection against volatility in the prices/costs of its operating subsidiaries for commodities such as oil and natural gas;
- Hedges for "operating margin" - intended to set the operating margin for a portion of the production of certain operating subsidiaries.

(b) Credit risk

Derivative financial instruments, time deposits, Bank Deposit Certificates (“CDBs”) and repurchase agreements backed by debentures and federal government securities create exposure to counterparty and issuer credit risk. The Company adopts the policy of working with issuers which have, at a minimum, been assessed by two of the following three rating agencies: Fitch, Moody's or Standard & Poor's ("S&P"). The minimum rating required for the counterparties is "A+" (Brazilian scale) or "BBB-" (international scale), or equivalent. For financial assets where issuers do not meet the minimum credit risk ratings, criteria proposed by the Finance Committee are applied as an alternative.
The credit quality of financial assets is disclosed in Note 8. The ratings disclosed in this note always represent the most conservative ratings of the agencies in question.

The pre-settlement risk methodology is used to assess counterparty risk on derivatives transactions, determining (via Monte Carlo simulations) the likelihood of a counterparty not honoring the financial commitments defined by the contract. The use of this methodology was approved by the Finance Committee.

The Company performs initial analyses of customer credit and, when necessary, guarantees deemed or letters of credit are obtained to safeguard the Company's interests. Additionally, most of the export sales to the United States, Europe and Asia are collateralized by letters of credit and credit insurance.

All amounts in millions of reais unless otherwise stated

(c) Liquidity risk

Liquidity risk is managed in accordance with the Liquidity and Indebtedness Management Policy, aimed at ensuring that there are sufficient net funds to meet the Company's financial commitments within its maturity schedules, with no additional costs. The main method for the measurement and monitoring of liquidity is cash flow forecasting, with a minimum projection period of 12 months from the reference date.

Liquidity and financial indebtedness management adopts comparable metrics provided by reputable global credit rating agencies for a stable BBB credit risk or equivalent.

The table below analyzes the Company's non-derivative financial liabilities and the main derivative financial assets and liabilities to the settled by the Company by maturity (the remaining period from the balance sheet up to the contractual maturity date). Derivative financial liabilities are included if their contractual maturities are essential to understanding the timing of cash flow. The amounts disclosed in the table represent the undiscounted cash flow, which includes interest to be incurred, and, accordingly, do not reconcile directly with the amounts in the balance sheet for borrowing and use of public assets.

	Up to one year	From one to three years	From three to five years	As from five years	Total
At December 31, 2015					
Borrowing - principal (i)	2,222	5,775	7,911	14,216	30,124
Borrowing - interest	1,845	3,516	2,352	7,549	15,262
Derivative financial instruments	476	2			478
Trade payables	4,136				4,136
Payables - trading	126				126
Dividends payable	162				162
Related parties	5	1,211			1,216
Use of public assets	72	160	180	2,558	2,970
	9,044	10,664	10,443	24,323	54,474
At December 31, 2014					
Borrowing - principal	1,161	6,061	6,876	9,536	23,634
Borrowing - interest	1,579	2,904	1,936	5,935	12,354
Derivative financial instruments	242	3			245
Trade payables	3,242				3,242
Payables - trading	116				116
Dividends payable	389				389
Related parties	10	885			895
Use of public assets	66	144	163	2,546	2,919
	6,805	9,997	8,975	18,017	43,794

(i) Does not include the recorded fair value of debts contracted by Resolution 4131.

6.1.1 Derivatives contracted

All derivative transactions were carried out in the over-the-counter market.

Hedging program for interest rates in US Dollars - derivative financial instruments contracted to adjust the exposure to LIBOR (arising from loans in US Dollars indexed to LIBOR floating rates) to the parameters established by the policy. The mitigation of these risks is carried out by means of swaps.

Hedging program for sales of nickel, aluminium and zinc at a fixed price - hedging transaction that converts sales at fixed prices to floating prices in commercial transactions with customers interested in purchasing products at fixed prices. The purpose of this strategy is to maintain the revenue flow of the BU linked to the LME prices. These operations usually relate to purchases of nickel, zinc and aluminum for future settlement in the over-the-counter market.

Hedging program for mismatches of quotation periods - this program hedges the different "quotation periods" between the purchases of certain inputs (metal concentrate) and sales of products arising from the processing of these inputs. These operations usually relate to purchases and sales of nickel, zinc and aluminum for future trading in the over-the-counter market.

Hedging program for the operating margins of metals - derivatives contracted to reduce the volatility of the cash flows from zinc, nickel and aluminum operations. With a view to ensuring a fixed operating margin in reais for a portion of the production of metals, the mitigation of risks is carried out through the sale of forward contracts for each commodity, combined with the sale of US Dollar forward contracts. In addition, the Company has executed derivative financial instruments to reduce the volatility of the cash flows from its zinc, copper and silver operations in Peru.

Hedging program for foreign exchange exposure - hedging instruments entered into to adjust the foreign exchange exposure according to the limits defined by the Finance Committee. The mitigation of these risks is carried out through the purchase of U.S. Dollar and Euro forward contracts.

Instruments to hedge Real-denominated debts - derivative financial instruments contracted to transform the fixed rates of Real-denominated debts into CDI floating rates. Risk mitigation is carried out by means of swaps. Changes in fair value are recognized in the statement of income.

Hedging program for foreign currency-denominated debts – hedging instruments contracted for the purpose of protecting the cash flow in local currency. Risk mitigation is carried out by means of cross-currency swaps.

The table below summarizes the derivative financial instruments and the underlying hedged items:

All amounts in millions of reais unless otherwise stated

Details of the main derivatives operations

Programs	Principal 2015	Principal 2014	As per unit	Purchase / Sale	Average FWD rate	Average term (days)	Fair value 2015	Fair value 2014	Realized gain (loss) 2015	Fair value by maturity 2016	2017	2018	2019	2020
Hedging instruments for interest rates in US Dollar														
LIBOR floating rate vs. US Dollar fixed rate swaps		10	USD million		2.56% % fixed rate	1,043			(22.4)					
									(22.4)					
Hedging instruments for metal sales at a fixed price														
Nickel forward	240	606	ton	P		136	(1.5)		(1.2)	(1.5)				
Zinc forward	7,336	1,663	ton	P		135	(4.0)	(0.2)	(5.8)	(4.1)	0.1			
Aluminum forward		2,500	ton					(0.6)	(1.7)					
							(5.5)	**(0.8)**	**(8.7)**	**(5.6)**	**0.1**			
Hedging instruments for mismatches of quotation periods														
Nickel forward	837	3,719	ton	P/S		8		2.9	(2.3)					
Zinc forward	341,905	371,386	ton	P/S		32	(4.8)	0.9	45.2	(4.8)				
Silver forward	229	366	k oz (*)	P/S		55	0.8	1.6	3.6	0.8				
Aluminum forward	2,850	17,881	ton	P/S		66		0.9	3.6					
							(4.0)	**6.3**	**50.1**	**(4.0)**				
Hedging instruments for the operating margin of metals														
Nickel forward	345	815	ton	S	19,505 USD/ton	1	14.6	(1.6)	91.5	14.6				
Zinc forward	6,775	10,730	ton	S	2,103 USD/ton	102	16.4	(1.8)	62.7	16.4				
Aluminum forward	7,900	5,400	ton	S	1,765 USD/ton	105	10.6		57.2	10.6				
Copper forward		160	ton					0.3	4.7					
Silver forward	25	56	k oz (*)	S	18 USD/oz	77	0.4	0.7	4.6	0.4				
US dollar forward	33	34	USD million	S	3.47 USD/oz	98	(24.0)	(5.9)	(204.8)	(24.0)				
							18.0	**(8.3)**	**15.9**	**18.0**				
Hedging instruments for foreign exchange exposure														
US Dollar forward			USD million						15.9					
Euro forward			EUR million	P	1.20 USD/EUR	1	(0.2)		(0.8)	(0.2)				
							(0.2)		**15.1**	**(0.2)**				
Hedging instruments for debts														
Fixed rate in reais vs. CDI floating rate swaps	230	230	BRL million		87.66% % CDI	262	(6.9)	(9.0)	(4.6)	(4.6)	(2.3)			
LIBOR floating rate vs. CDI floating rate swaps	763	484	USD million		102.74% % CDI	1,221	395.1	50.6	176.6	(283.1)	(58.2)	136.5	163.2	436.7
US Dollar fixed rate vs. CDI floating rate swaps	105		USD million		104.83% % CDI	1,653	27.7		(13.8)	(39.0)	(35.9)	(29.1)	(23.0)	154.7
							415.9	**41.6**	**158.2**	**(326.7)**	**(96.4)**	**107.4**	**140.2**	**591.4**
Total							**424.2**	**38.8**	**208.2**	**(318.5)**	**(96.3)**	**107.4**	**140.2**	**591.4**

(*) oz– Ounces troy

All amounts in millions of reais unless otherwise stated

Details of the main derivatives operations

	Principal						Fair value		Realized gain (loss)	Fair value by maturity				
Programs	2015	2014	As per unit	Purchase / Sale	Average FWD rate	Average term (days)	2015	2014	2015	2016	2017	2018	2019	2020
Hedge accounting - Cash flow hedge														
Hedging instruments for the operating margin of metals														
Nickel forward		3,990	ton					45.6	107.7					
Zinc forward	36,650	70,005	ton	S	2,095 USD/ton	120	69.0	1.1	81.0	69.0				
Aluminum forward	40,050	42,200	ton	S	1,751 USD/ton	126	37.2	8.8	67.9	37.2				
Copper forward		1,097	ton		USD/ton			2.1	4.4					
Silver forward	125	217	k oz (*)	S	18 USD/oz	92	1.9	2.9	4.2	1.9				
US Dollar forward	135	245	USD million	S	4 BRL/USD	122	(76.5)	(58.7)	(222.9)	(76.5)				
							31.6	**1.8**	**42.3**	**31.6**				
Hedging instruments for mismatches of quotation periods														
Zinc forward	97,180	100,355	ton	P/S		52	2.0	(0.3)	(22.4)	2.0				
Aluminum forward		10,025	ton					1.5	1.4					
Silver forward	293	400	k oz (*)	P/S		73	0.9	1.2	2.5	0.9				
							2.9	**2.4**	**(18.5)**	**2.9**				
Hedging instruments for interest rates in US dollar														
LIBOR floating rate vs. US Dollar fixed rate swaps	600	600	USD million		2.56% % fixed rate	1,043	6.1	14.6	(22.3)	(10.6)	4.2	9.5	3.0	
							6.1	**14.6**	**(22.3)**	**(10.6)**	**4.2**	**9.5**	**3.0**	
Hedge accounting - fair value hedge														
Hedging instruments for metal sales at a fixed price														
Zinc forward	2,230	4,563	ton	P	1,687	141	(1.0)	(0.1)	(1.6)	(1.0)				
							(1.0)	**(0.1)**	**(1.6)**	**(1.0)**				
Total							**39.6**	**18.7**	**(0.1)**	**22.9**	**4.2**	**9.5**	**3.0**	
Total (net)							**463.8**	**57.5**	**208.1**	**(295.6)**	**(92.1)**	**116.9**	**143.2**	**591.4**

(*) oz– Ounces troy

The transactions involving derivative financial instruments recognized in the statement of income amount to R$ 436, with R$ 28 recognized in carrying value adjustments.

All amounts in millions of reais unless otherwise stated

6.1.2 Fair value estimation

The main financial assets and liabilities are described below, as well as their valuation assumptions:

- Cash and cash equivalents, financial investments, trade receivables and other current assets - considering the nature and the terms, the amounts recorded approximate their realizable values.
- Financial liabilities - these instruments are subject to the usual market interest rates. The market value was based on the present value of the expected future cash disbursements, at interest rates currently available for the issue of debts with similar maturities and terms.
- Derivative financial instruments - the methods for determining the fair values of the derivative instruments used by the Company for hedging transactions were based on procedures commonly used in the market, which are in compliance with widely-tested theoretical bases.

The Company discloses fair value measurements according to their level of the following fair value measurement hierarchy:

- Quoted prices (unadjusted) in active markets for identical assets and liabilities (level 1).
- Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2).
- Inputs for the assets or liabilities that are not based on observable market data (that is, unobservable inputs) (level 3).

As at December 31, 2015 and 2014, the financial assets and liabilities carried at fair value were classified as levels 1 and 2 in the fair value measurement hierarchy.

		Fair value measured based on		2015
	Note	Prices quoted in an active market (Level 1)	Valuation technique supported by observable prices (Level 2)	Fair value
Assets				
Cash and cash equivalents	9	1,022	5,627	6,649
Financial investments	10	1,350	2,622	3,972
Derivative financial instruments	6.1.1		942	942
Firm commitment	15		968	968
		2,372	10,159	12,531
Liabilities				
Borrowing	20 (j)	11,699	15,304	27,003
Derivative financial instruments	6.1.1		478	478
		11,699	15,782	27,481

		Fair value measured based on		2014
	Note	Prices quoted in an active market (Level 1)	Valuation technique supported by observable prices (Level 2)	Fair value
Assets				
Cash and cash equivalents	9		3,540	3,540
Financial investments	10	1,546	2,343	3,889
Derivative financial instruments	6.1.1		302	302
Firm commitment			1,294	1,294
		1,546	7,479	9,025
Liabilities				
Borrowing		10,184	13,499	23,683
Derivative financial instruments	6.1.1		245	245
		10,184	13,744	23,928

All amounts in millions of reais unless otherwise stated

6.1.3 Hedges of net investments in foreign operations

The hedged items that the Company and its subsidiaries designated as a calculation tool refer to the investments shown in the table below, as well as part of its debts and its subsidiaries VCSA, CBA, VMZ, VMSA and VS, denominated in Euros and US Dollars.

	2015		2014	
	Investment	Debts	Investment	Debts
Votorantim Metais Cajamarquilla S.A. – (“Cajamarquilla”)	7,288	6,447	4,572	4,738
US Zinc Corporation – (“US Zinc”)	1,747	1,747	1,387	1,387
Votorantim Cement North America Inc.- ("VCNA")	4,244	5,560	4,346	4,109
Votorantim Cimentos EAA Inversiones, S.L. – ("VCEAA")	3,522	4,888	3,892	3,043

The Company documents the correlation between its hedges and the related obligations by assessing the effectiveness of net investment hedges both prospectively and retrospectively on a quarterly basis.

As from July 1, 2015, for purposes of ensuring an effective analysis of net investment hedges, VCSA has included the effect of income tax and social contribution as a gross-up of designated debts.

VCSA also has borrowing denominated in USD with compound financial instruments, contracted as a single product with the financial institution (US Dollar borrowing + CDI floating rate swaps). The terms and conditions of the loan and derivative instrument are configured as a combined operation, so that the resulting cost is a debt adjusted by a percentage of the CDI in reais. At December 31, 2015, the amount of the operations in this modality was USD 503 million (R$ 1,963) (December 31, 2014 - USD 301 million - R$ 798).

The exchange loss on the translation of debts recognized in other comprehensive income in the year ended December 31, 2015 was R$ 3,948 (December 31, 2014 - R$ 883).

6.1.4 Sensitivity analysis

Presented below is a sensitivity analysis of the main risk factors that affect the pricing of the outstanding financial instruments relating to cash and cash equivalents, financial investments, borrowing, and derivative financial instruments. The main risk factors are exposure to the fluctuations of the US Dollar and euro exchanges rates, LIBOR and Interbank Deposit Certificate (“CDI”) interest rates, US Dollar coupon and commodity prices. The scenarios for these factors were prepared using market and specialized sources, following the Company's systems of governance.

The scenarios at December 31, 2015, are described below:

- Scenario I is based on the market forward curves and quotations at December 31, 2015, and represents a probable scenario in management's opinion as at March 31, 2016.
- Scenario II considers a stress factor of + / – 25% applied to the market forward curves and quotations as at December 31, 2015.
- Scenario III considers a stress factor of + / – 50% applied to the market forward curves and quotations as at December 31, 2015.

All amounts in millions of reais unless otherwise stated

										Impacts on profit (loss)					Impacts on comprehensive income
						Scenario I				Scenarios II and III	Scenario I				Scenarios II and III
Risk factors	**Cash and cash equivalents and financial investments (i)**	**Borrowing**	**Derivative financial instruments**	**As per unit**	**Changes from 2015**	**Results of scenario I**	**-25%**	**-50%**	**+25%**	**+50%**	**Results of scenario I**	**-25%**	**-50%**	**+25%**	**+50%**
Foreign exchange rate															
USD	3,521	16,314 (**)	1,636	USD million	2%	(67)	726	1,452	(726)	(1,452)	(177)	1,852	3,704	(1,852)	(3,704)
EUR	224	5,346		EUR million	4%	(1)	9	17	(9)	(17)	(179)	1,317	2,634	(1,317)	(2,634)
ARS	344										(9)	(84)	(168)	84	168
Interest rates															
BRL - CDI	3,949	5,355	4,275	BRL million	-1 bps	2	56	113	(55)	(108)	1	4	9	(4)	(8)
LIBOR		5,622	2,353	USD million	8 bps		(31)	(61)	31	61	4	(23)	(46)	23	45
US Dollar coupon			1,036	USD million	110 bps	(135)	85	175	(80)	(156)	(4)	2	5	(2)	(5)
Price - Commodities															
Nickel			1,422	ton	4%		(2)	(3)	2	3					
Zinc			492,076	ton			70	141	(70)	(141)		35	70	(35)	(70)
Aluminum			50,800	ton	-4%						9	59	118	(59)	(118)
Silver			672	oz (*) thousand	5%		1	2	(1)	(2)	(1)	6	11	(6)	(11)
Firm commitment - electric energy															
Sale and purchase agreement - fair value			968	BRL million			22	45	(20)	(39)					

(*) oz – Ounces troy
(**) Considers currency basket

(i) The balances presented in the sensitivity analysis do not match the cash and cash equivalents and short-term investments notes, as the sensitivity analysis covers only the most significant currencies.

All amounts in millions of reais unless otherwise stated

6.1.5 Capital management

The Company's objectives when managing capital are to safeguard its ability to continue as a going concern in order to consistently provide returns to stockholders and benefits for other stakeholders, as well as maintaining an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust its capital structure, the Company can make, or propose to the Board of Directors when their approval is required, adjustments to the amounts of dividends paid to stockholders, return capital to stockholders, issue new shares or sell assets.

One of the important indicators through which the Company monitors its capital is the gearing ratio, calculated as net debt divided by adjusted EBITDA. Net debt is calculated as total debt less cash and cash equivalents and the amount of financial investments, adding or subtracting the fair value of derivative contracts. The adjusted EBITDA is calculated based on the profit for the year plus equity in the results of investees, the realization of comprehensive income on the disposal of investments, net finance results, income tax and social contribution, plus depreciation, amortization and depletion, and dividends received from investees. Non-cash items considered by management as exceptional are excluded from the measurement of the adjusted EBITDA.

The net debt ratios in 2015 and 2014 are as follows:

	Note	2015	2014
Borrowing	20	30,531	24,003
Cash and cash equivalents	9	(6,649)	(3,540)
Derivative financial instruments	6.1.1	(464)	(57)
Financial investments	10	(3,972)	(3,889)
Net debt (A)		19,446	16,517
Adjusted annualized EBITDA (B)	34 (d)	6,994	7,137
Gearing ratio (A/B)		2.78	2.31

All amounts in millions of reais unless otherwise stated

7 Financial instruments by category

	Note	Borrowing and receivables	Assets held for trading	Available-for-sale assets	Held-to-maturity investments	Derivatives used for hedging	Total
							2015
Assets as per balance sheet							
Cash and cash equivalents	9	6,649					6,649
Financial investments	10		3,275	670	27		3,972
Derivative financial instruments	6.1.1		759			183	942
Trade receivables	11	2,745					2,745
Related parties	14	3,188					3,188
Financial instruments - firm commitment	15		968				968
		12,582	5,002	670	27	183	18,464

		Liabilities at fair value through profit or loss	Derivatives used for hedging	Other financial liabilities	Total
					2015
Liabilities as per balance sheet					
Borrowing	20			30,531	30,531
Derivative financial instruments	6.1.1	353	125		478
Trade payables				4,136	4,136
Related parties	14			1,216	1,216
Payables - trading	22			126	126
Use of public assets	24			1,125	1,125
		353	125	37,134	37,612

		Borrowing and receivables	Assets held for trading	Available-for-sale assets	Held-to-maturity investments	Derivatives used for hedging	Total
							2014
Assets as per balance sheet							
Cash and cash equivalents	9	3,540					3,540
Financial investments	10		3,134	709	46		3,889
Derivative financial instruments	6.1.1		191			111	302
Trade receivables	11	2,466					2,466
Related parties	14	2,482					2,482
Financial instruments - firm commitment	15		1,294				1,294
		6,006	4,619	709	46	111	13,973

		Liabilities at fair value through profit or loss	Derivatives used for hedging	Other financial liabilities	Total
					2014
Liabilities as per balance sheet					
Borrowing	20			24,003	24,003
Derivative financial instruments	6.1.1	142	103		245
Trade payables				3,242	3,242
Related parties	14			895	895
Payables - trading	22			116	116
Use of public assets	24			1,018	1,018
		142	103	29,274	29,519

All amounts in millions of reais unless otherwise stated

8 Credit quality of financial assets

The table below summarizes the credit quality of issuers and counterparties in transactions involving cash and cash equivalents, financial investments and derivatives:

			2015			**2014**
	Local rating	**Global rating**	**Total**	**Local rating**	**Global rating**	**Total**
Cash and cash equivalents						
AAA	1,903		1,903	1,284		1,284
AA+	617		617	8		8
AA	291		291			
AA-		6	6		4	4
A+		117	117		243	243
A		645	645		292	292
A-		251	251	1	293	294
BBB+		550	550		500	500
BBB		106	106		410	410
BBB-		233	233		171	171
BB+					73	73
BB		18	18		10	10
B+		116	116		27	27
CCC		1	1		3	3
CCC-		19	19		11	11
Unrated		1,776	1,776	46	164	210
	2,811	3,838	6,649	1,339	2,201	3,540
Financial investments						
AAA	1,672		1,672	2,137	66	2,203
AA+	851		851	450		450
AA	188		188			
A+		8	8		159	159
A	3		3	17	270	287
A-	16	358	374	1		1
BBB+					74	74
BBB		1	1		2	2
BBB-		195	195		274	274
CCC		179	179		99	99
CCC-		136	136		27	27
Unrated	208	157	365	236	77	313
	2,938	1,034	3,972	2,841	1,048	3,889
Derivative financial assets						
AAA	282		282	143		143
AA+	194		194			
AA	2		2			
A+		342	342		9	9
A		122	122		5	5
A-					122	122
BBB					22	22
BBB-					1	1
	478	464	942	143	159	302
	6,227	5,336	11,563	4,323	3,408	7,731

The local and global ratings were obtained from the ratings agencies S&P, Moody's and Fitch. The Company considered the ratings of S&P and Fitch for presentation purposes.

Local rating*:* Local scale ratings are ratings for the specific purpose of being applied to credits in a certain country or region. They consist of credit quality assessments related to the “best” credit risk rating within a certain country or region. The “best” risk is usually, but not always, attributed to all financial commitments issued or guaranteed by the sovereign state.

All amounts in millions of reais unless otherwise stated

Global rating: International credit ratings are related to foreign currency or local currency commitments and, in both cases, assess the ability to honor these commitments, using a globally-applicable scale. Thus, both the foreign currency rating and the local currency rating consist of internationally comparable assessments.

9 Cash and cash equivalents

	2015	2014
Local currency		
Cash and banks	16	128
Repurchase agreements - public securities	1,021	
Repurchase agreements	1,774	1,211
	2,811	1,339
Foreign currency		
Cash and banks	2,905	1,279
Certificates of deposits	933	922
	3,838	2,201
	6,649	3,540

Cash and cash equivalents are highly liquid, readily convertible into a known amount of cash and have an insignificant risk of change in value if early redemption is requested. Investments in local currency comprise government and financial institution bonds, indexed to the interbank deposit rate. Investments in foreign currency are mainly composed of fixed income financial instruments (time deposits).

10 Financial investments

	2015	2014
Held-for-trading		
Repurchase agreements - Public securities	663	754
Financial Treasury Bills (LFT)	679	562
Credit Rights Investment Funds (FIDC)	243	269
Financial investments in foreign currency	364	339
Repurchase agreements	729	950
Bank Deposit Certificates (CDB)	592	23
Investment fund quotas	1	2
National Treasury Bills (LTN)		230
Other	4	5
	3,275	3,134
Available-for-sale		
Financial investments in foreign currency	670	709
	670	709
Held-to-maturity		
Investment fund quotas		34
Bank Deposit Certificates (CDB)	27	12
	27	46
	3,972	3,889
Current	(3,936)	(3,870)
Non-current	36	19

The financial investments have, for the most part, immediate liquidity. Investments in local currency comprise government and financial institution bonds, indexed to the interbank deposit rate. Investments in foreign currency are mainly composed of fixed income financial instruments (time deposits).

All amounts in millions of reais unless otherwise stated

11 Trade receivables

(a) Breakdown

	Note	2015	2014
Trade receivables - foreign customers		1,717	1,508
Trade receivables - Brazil		1,118	976
Related parties	14	65	96
Estimated loss for doubtful accounts		(155)	(114)
		2,745	2,466

(b) Breakdown by currency

	2015	2014
Real	1,065	1,037
US Dollar	758	720
Canadian Dollar	247	169
Euros	139	128
Colombian Pesos	97	87
Argentine Pesos	89	83
Other currencies	350	242
	2,745	2,466

(c) Changes in estimated loss for doubtful accounts

	2015	2014
Opening balance	(114)	(90)
Additions, net	(74)	(56)
Receivables written off as uncollectible	55	33
Foreign exchange variations	(22)	(1)
Closing balance	(155)	(114)

The constitution of estimated loss for doubtful accounts is recorded in the income for the year as "selling expenses". The values registered in the estimated loss account are generally written off when they are deemed to be uncollectible.

(d) Aging of trade receivables

	2015	2014
Current	2,283	2,225
Up to three months past due	426	256
Three to six months past due	59	14
Over six months past due	132	85
Estimated loss for doubtful accounts	(155)	(114)
	2,745	2,466

All amounts in millions of reais unless otherwise stated

12 Inventory

(a) Breakdown

	2015	2014
Finished products	652	660
Semi-finished products	1,539	1,498
Raw materials	866	597
Auxiliary materials	1,130	885
Imports in transit	191	173
Other	71	101
Provision for losses (i)	(561)	(441)
	3,888	3,473

(i) Mainly refers to the obsolescence of inventory the value of which has a limited expectation of realization. No inventory was pledged as collateral for liabilities.

13 Taxes recoverable

	2015	2014
Corporate Income Tax (IRPJ) and Social Contribution on Net Income (CSLL)	886	633
State Value-added Tax on Sales and Services (ICMS)	529	577
Social Contribution on Revenue (COFINS)	414	461
Value-added Tax (VAT) (foreign companies)	293	234
IRPJ/CSLL - Summer Plan	184	266
State Value-added Tax on Sales and Services (ICMS) on PP&E (i)	99	132
Social Integration Program (PIS)	93	117
Excise Tax (IPI)	38	37
Withholding Income Tax (IRRF)	7	19
Other	148	134
	2,691	2,610
Current	(1,376)	(1,086)
Non-current	1,315	1,524

(i) ICMS credits that arise from purchases of property, plant and equipment items (recoverable in 48 monthly installments) and consumable products. Their realization is based on the subsidiaries' operations.

All amounts in millions of reais unless otherwise stated

14 Related parties

	Trade receivables		Dividends receivable		Non-current assets		Trade payables		Dividends payable		Non-current liabilities	
	2015	**2014**	**2015**	**2014**	**2015**	**2014**	**2015**	**2014**	**2015**	**2014**	**2015**	**2014**
Parent												
Votorantim Participações S.A. (i)	2	2			659	598			162	379	487	433
Related companies and joint ventures												
Cementos Avellaneda S.A.	12	1					1	1			96	
Citrosuco GmbH					246	167						
Citrosuco S.A. Agroindústria (ii)					441	374						
Citrovita Orange Juice GmbH (iii)					774	516						
Fibria Celulose S.A.	4	1	24	11	1	1	14	36				
Hailstone Limited (iv)					20	14					553	382
Ibar Administração e Participação Ltda.					3	5						22
Sitrel - Siderurgica Três Lagoas Ltda. (v)	13	20					32	23				
St. Helen Holding II B.V. (vi)					1,003	699					40	27
Superior Materials Holdings, LLC	6	10										
Supermix Concreto S.A.	21	25										
Suwannee American Cement LLC						80	41	19				
Verona Particpações Ltda.				11								
Other	7	37	18	23	41	28	3	1			40	31
	65	96	42	45	3,188	2,482	91	80	162	379	1,216	895
Non-controlling interests										10		
Current	(65)	(96)	(42)	(45)			(91)	(80)	(162)	(389)		
Non-current					(3,188)	(2,482)					(1,216)	(895)

All amounts in millions of reais unless otherwise stated

	Sales		Purchases		Finance income (costs)	
	2015	2014	2015	2014	2015	2014
Parent						
Votorantim Participações S.A. (i)					(25)	(22)
Related companies and joint ventures						
Cementos Especiales de las Islas, S.A.	17					
Citrosuco S.A. Agroindústria	9	8			15	11
Citrovita Orange Juice GmbH					14	10
Fibria Celulose S.A.	40	38				
Maré Cimento Ltda	66	80				
Mizu S.A.	74	69				
Sitrel - Siderurgica Três Lagoas Ltda (v)	308	292	228	226		
St. Helen Holding II B.V. (vi)					24	22
Superior Materials Holdings, LLC	49	30				
Supermix Concreto S/A	346	391				
Polimix Concreto Ltda.	175	141				
Other	45	28	13	8	(8)	(3)
	1,129	1,077	241	234	20	18

(i) Refers essentially to receivables from the sale of deferred tax credits arising from tax losses to VPAR. This tax was used by VPAR for payment under the Tax Recovery Program ("REFIS") established by Law 12,865/2013. Liability relating to a debt of VGmbH to VPAR, adjusted at the rate of 2.5% per year.
(ii) Refers to prepayment transactions, adjusted based on semiannual LIBOR plus a spread of 2.75% per year.
(iii) Balance receivable adjusted based on annual LIBOR and a spread of 2% per year.
(iv) Refers to debt of VGmbH, adjusted based on monthly LIBOR plus a spread of 1.5% per year.
(v) Refers to business transactions between Sitrel and VS, mainly relating to the rod rolling process at the Sitrel plant, which uses billets from VS's Resende unit as its main raw material.
(vi) Refers to the credits of VGmbH, based on semiannual LIBOR plus a spread of 2.5% per year.

All amounts in millions of reais unless otherwise stated

15 Financial instruments – firm commitment

The Company, through its subsidiary Votener, is engaged in sales of electrical energy in the Regulated Contracting Environment (“ACR”) (“CCEE”) and most recently participated in the 13th electric energy auction on April 30, 2014 in which it signed a firm commitment relating to the sale of surplus energy to be supplied until 2019. These transactions resulted in a gain to the Company on sale of surplus energy, which was recognized at its fair value. During the year ended December 31, 2015, the fair value realization on these transactions, amounting to R$ 34, through the physical settlement of contracts of sale and purchase of energy and was recorded in "Other operating income (expenses), net" (Note 28).

Additionally, the Company, also through its subsidiary Votener, is engaged in the Deregulated Contracting Environment (“ACL”), which also resulted in gain recognition at fair value of the purchase and sale transactions and surplus energy to be supplied until 2020. During the year ended December 31, 2015, the fair value realization on these transactions, amounting to R$ 171, was recorded in "Other operating income (expenses), net" (Note 28).

During the year ended December 31, 2014, the subsidiary CBA signed with subsidiary Votener purchase and sale of surplus electricity contracts in the Free Market up until December 2019. During the year ended December 31 2015, realization of the fair value of these transactions was R$ 121, recorded as "Other operating income (expenses), net" (Note 28).

16 Other assets

	2015	2014
Receivables from sales of ownership interests	421	115
Advances to suppliers	217	185
Prepaid expenses	169	103
Insurance	64	23
Writs of payment	58	34
Advances to employees	57	43
Notes receivable	48	7
Social security credits	30	28
Royaties	28	20
Deposit for reinvestments	24	27
Tax credits	21	62
Fiduciary contracts	16	15
Checks to be cleared	10	9
Lease	7	2
Receivables from sale of PP&E		14
Other receivables	112	77
	1,282	764
Current	(767)	(467)
Non-current	515	297

All amounts in millions of reais unless otherwise stated

17 Investments

(a) Breakdown

	Information on investees at December 31, 2015			Equity in the results		Investment balance	
	Equity	Profit (loss) for the year	Ownership percentage (%)	2015	2014	2015	2014
Investments accounted for based on the equity method							
Subsidiaries and associates							
Sirama Participações Administração e Transportes Ltda. (iv)				57	80		372
Cementos Avellaneda S.A. (i)	534	178	49.00	87	43	318	267
Cementos Bio Bio S.A. (ii)	1,208	123	16.70	21	13	202	154
Alunorte - Alumina do Norte S.A. (ii)	4,286	211	3.03	6	(8)	130	124
Cemento Portland S.A.	274	14	35.86	4	1	98	72
Mineração Rio do Norte S.A. (ii)	910	361	10.00	36	4	91	61
Supermix Concreto S.A.	256	49	25.00	12	3	64	52
Outros investimentos				8	58	266	537
Joint ventures							
Fibria Celulose S.A. (v)	12,752	342	29.42	54	46	3,573	4,285
Suwannee American Cement LLC (i)	306	(6)	50.00	(3)	(11)	257	177
Sitrel Siderúrgica Três Lagoas Ltda. (iii)	193	24	50.00	12	29	96	117
Superior Building Materials LL	84	34	50.00	17		42	26
Sumter Cement Co LLC	52	1	50.00			26	18
Trinity Materials LLC.	22		50.00			11	8
				311	258	5,174	6,270

(i) Cementos Avellaneda S.A. and Suwannee American Cement LLC recorded, on December 31, 2015, the amounts of R$ 56 and R$ 104 (December 31, 2014 - R$ 66 and R$ 71), respectively, relating to goodwill paid on the acquisition of these investments.

(ii) Refers to investees in which the ownership interest is less than 20%, but over the activities of which the Company exercises significant influence through agreements established with other shareholders.

(iii) In the first quarter of 2015, Sitrel decided in a special meeting of shareholders to reduce its share capital by R$ 61, to eliminate the payment of capital increase installments amounting to R$ 12, and to make a restitution to its shareholders, in local currency, amounting to R$ 49, in proportion to its stake of the capital.

(iv) On October 31, 2015, the investment in Sirama Participações Administração e Transportes (R$ 381) was transferred to "Assets held-for-sale".

(v) The investee Fibria, in the Extraordinary General Meeting held on November 30, 2015, approved the proposal to distribute interim dividends in the proportional amount of R$ 589, paid to the Company on December 09, 2015. The equity income of the investee considers eliminations of unrealized profits with the Company.

All amounts in millions of reais unless otherwise stated

(b) Information on investees

A summary of the principal financial information on associates and joint ventures at December 31, 2015 is presented below:

	Total and voting (%)	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Other comprehensive income	Equity (i)	Net revenue	Operating profit (loss)	Finance income (costs)	Profit (loss) for the year
Investments accounted for under the equity method											
Cementos Avellaneda S.A.	49.00	448	363	270	7	(52)	534	1,378	283	1	178
Cementos Bio Bio S.A.	16.70	668	2,084	376	1,168	248	1,208	1,600	169	(42)	123
Alunorte - Alumina do Norte S.A.	3.03	1,259	6,501	1,920	1,554		4,286	5,995	1,466	(1,190)	211
Cemento Portland S.A.	35.86	132	223	69	12	77	274		(5)	26	14
Mineração Rio do Norte S.A.	10.00	498	1,754	519	823		910	1,505	660	(229)	361
Supermix Concreto S.A.	25.00	262	213	144	75		256	1,493	63	(2)	49
Joint ventures											
Fibria Celulose S.A.	29.42	6,311	23,303	2,955	13,907	38	12,752	10,081	3,524	(3,685)	342
Suwannee American Cement LLC	50.00	221	266	53	128	103	306	(5)	(28)		(6)
Sitrel Siderúrgica Três Lagoas Ltda.	50.00	149	262	55	163		193	371	69	(45)	24

(i) Equity comprises the balance of comprehensive income presented.

All amounts in millions of reais unless otherwise stated

(c) Changes in investments

	2015	2014
Opening balance	6,270	5,993
Equity in the results of investees	311	258
Capital increase	22	
Foreign exchange gains (losses) on foreign investments	162	(2)
Write-off of Silcar's investment (i)	(315)	
Reclassification to assets available for sale	(381)	
Capital reduction	(57)	
Dividends	(730)	(66)
Effect of subsidiaries included in consolidation		80
Unrealized profits between related parties	(132)	
Other	24	7
Closing balance	5,174	6,270

(i) On October 08, 2015, the subsidiary Silcar sale in the investees Polimix Cimento Ltda., Polimix Concreto Ltda., Mizu S.A., Verona Participações Ltda. e Maré Cimento Ltda. to RV Empreendimentos Ltda. ("RV") and Polimx Concreto Ltda. ("Polimix") as well as assets (industrial equipment) and other liabilities.

(d) Investments in listed companies

	2015		2014	
	Book value	Market value	Book value	Market value
Cementos Bio Bio S.A. (*)	202	127	154	99
Fibria Celulose S.A. (*)	3,573	8,414	4,285	5,298

(*) Calculated in proportion to the ownership interest held by the Company.

(e) Non-controlling interests

Non-controlling interests at December 31, 2015 amounted to R$4,176 (2014 – R$ 3,483), of which R$2,335 refer to Cajamarqila (2014 – R$ 2,059), R$ 1,069 to Milpo (2014 – R$ 908), R$ 676 to VCEAA (2014 – R$ 209) and R$ 96 to others (2014 – R$ 307).

All amounts in millions of reais unless otherwise stated

18 Property, plant and equipment

(a) Breakdown and changes

	Land and improvements	Buildings and constructions	Machinery, equipment and facilities	Vehicles	Furniture and fittings	Construction in progress	Leasehold improvements	Other	2015 Total	2014 Total
Opening balance										
Cost	1,736	9,293	30,332	1,315	191	3,041	446	442	46,796	44,883
Accumulated depreciation	(47)	(3,203)	(15,825)	(985)	(136)		(205)	(358)	(20,759)	(18,569)
Net opening balance	1,689	6,090	14,507	330	55	3,041	241	84	26,037	26,314
Additions	178	11	68	4	1	3,069		4	3,335	2,505
Disposals	(28)	(6)	(97)	(16)		(7)	(2)	(6)	(162)	(248)
Depreciation	(4)	(297)	(1,718)	(108)	(13)		(20)	(3)	(2,163)	(1,816)
Foreign exchange gains (losses)	237	554	1,505	56	8	279	55		2,694	111
Effect of subsidiaries included in consolidation										5
Provision for impairment (ii)	(5)	(5)	(288)		(6)	(93)	(5)	1	(401)	(545)
Reclassification to assets held for sale		244	18	(15)	(1)	35			281	
Transfers to taxes recoverable										(80)
Transfers (i)	87	273	1,880	82	17	(2,696)	12		(345)	(209)
Closing balance	2,154	6,864	15,875	333	61	3,628	281	80	29,276	26,037
Cost	2,206	10,893	36,095	1,437	229	3,628	560	438	55,486	46,796
Accumulated depreciation	(52)	(4,029)	(20,220)	(1,104)	(168)		(279)	(358)	(26,210)	(20,759)
Net closing balance	2,154	6,864	15,875	333	61	3,628	281	80	29,276	26,037
Average annual depreciation rates - %	6	3	7	18	10		7	10		

(i) Transfers during the year relate to the reclassification from "Construction in progress" within "Property, plant and equipment" to "Inventory" (R$ 53) and to "Software" and "Rights to use natural resources", within "Intangible assets" (R$ 292).

(ii) In December 2015, the subsidiary VMSA recorded impairment in "Machinery, equipment and facilities" and "Construction in progress" amounting to R$ 253 and R$ 95, respectively. This reduction was based on the estimated future cash flows, where the carrying amount of these assets exceeds its recoverable amount.

All amounts in millions of reais unless otherwise stated

The consolidated amounts relating to assets pledged as collateral for loans are described in Note 20 (e).

(b) Construction in progress

The balance is made up mainly of projects for the expansion and optimization of industrial units, as shown below:

	2015	2014
Segment		
Cement	2,028	1,770
Zinc and byproducts	837	431
Steel	368	397
Aluminum	287	314
Other	108	129
	3,628	3,041

The main projects in progress by business segment are as follows:

Main projects in progress - Cement	2015	2014
New unit in Edealina - GO	101	492
New unit in Primavera - PA	711	327
New unit in Yacuses - Santa Cruz/Bolivia	245	124
New unit in Sivas - Turkey	195	5
New unit in Ituaçú - BA	44	45
Renovation of equipment - Cement	54	44
Equipment refurbishment - Cement	42	39
Cement production capacity expansion - North America	88	21
Clinker production capacity expansion - Turkey	43	26
Aggregates production capacity expansion - North America	39	18
New unit in Sobral - CE	21	8
New lines of co-processing	9	51
Reforming furnaces in Spain, Tunisia and Morocco	12	9
Concrete factory change - North America	13	6
New unit in Cuiabá - MT	6	17
Other	405	538
	2,028	1,770

Main projects in progress - Zinc and byproducts	2015	2014
Vazante expansion project - Brazil	133	115
Security, health and environment projects - Brazil	133	18
Reject treatment line - Peru	70	40
Plant maintenance project - Peru	64	32
Pucurhuay hydroelectric plant - Peru	41	29
Waste storage - Peru	2	15
Plant of concentrated ore - Peru	52	12
Mineral extraction - Peru	87	8
Mineral grinding - Peru	19	15
Roasting - Peru	48	2
Information technology projects - Peru	20	5
Project electrometallurgy - Peru	2	9
Project Santa Bárbara - Peru	17	11
Production line construction - Brazil	19	21
General services - Peru	17	4
Desalination plant - Peru	24	4
Other	89	91
	837	431

All amounts in millions of reais unless otherwise stated

Main projects in progress - Steel	**2015**	**2014**
Mechanized underground operations involving metallurgical coal	142	127
Security projects, health and environment	32	24
Repair plant operating equipment	44	29
Expansion project - Florestal	31	6
Modernization of plant operating equipment	22	22
Scrap crushing equipment project	9	9
Expansion project - Resende	17	20
Battery vertical repair project	13	2
Carbon extraction project	5	5
Ore project exploration program	7	2
Expansion project - Barra Mansa	8	18
Revitalization and adaptation of plant	5	4
Expansion project - Guararapes	4	3
Other	29	126
	368	397

Main projects in progress - Aluminum	**2015**	**2014**
Furnace refurbishment	12	55
Rondon Alumina project - SP	100	78
Plastic transformation and foundry projects	44	30
Alumina factory project	21	41
Automation system modernization	25	18
Revitalization and adequacy of power plant	22	18
Furnace rooms project	20	12
Project safety, health and environment - SP	8	9
Mining projects - MG	13	4
Calcination furnace	5	5
Room ovens VIII	3	3
Other	14	41
	287	314

All amounts in millions of reais unless otherwise stated

19 Intangible assets

(a) Breakdown and changes

									2015	2014
	Rights over natural resources	Goodwill	Use of public assets (Note 24)	ARO (i)	Contracts, customer relationship and agreements	Software	Rights over trademarks and patents	Other	Total	Total
Opening balance										
Cost	7,109	5,251	541	631	375	424	355	664	15,350	13,613
Accumulated amortization	(1,362)		(122)	(306)	(196)	(317)	(216)	(313)	(2,832)	(1,929)
Net opening balance	5,747	5,251	419	325	179	107	139	351	12,518	11,684
Additions	46			37		7		15	105	82
Disposals		(4)		(1)	(23)	(1)		(10)	(39)	(22)
Amortization and depletion	(380)		(19)	(49)	(27)	(37)	(32)	(27)	(571)	(434)
Foreign exchange gains (losses)	2,076	1,638		38	77	28	42	138	4,037	1,084
Provision for impairment loss (iii)	(3)	(237)						(11)	(251)	(51)
Reclassification to assets held for sale	55	365							420	
Revision of estimated cash flow				99					99	(34)
Update of the interest rate				(35)					(35)	
Transfers (ii)	271					45	(20)	(4)	292	209
Closing balance	7,812	7,013	400	414	206	149	129	452	16,575	12,518
Cost	10,093	7,013	541	840	489	574	491	823	20,864	15,350
Accumulated amortization	(2,281)		(141)	(426)	(283)	(425)	(362)	(371)	(4,289)	(2,832)
Net closing balance	7,812	7,013	400	414	206	149	129	452	16,575	12,518
Average annual amortization rates - %	6		7	7	7	21	9	11		

(i) Asset retirement obligation.

(ii) The transfers during the year relate to the reclassification of “Construction in progress” from “Property, plant and equipment” to “Software” and “Rights to use natural resources” within “Intangible assets”.

(iii) Due to the unfavorable macroeconomic scenarios, in 2015 the management of the subsidiary VCSA recognized impairment of goodwill in the amount of R$ 237, as described in Note 19 (c)

All amounts in millions of reais unless otherwise stated

(b) Goodwill on acquisitions

Description	2015	2014
Cement		
European Segment		
Votorantim Cimentos EAA Inversiones, S.L.	1,474	925
North American Segment		
Votorantim Investimentos Internacionais S.A.	831	774
Prairie Material Sales Inc.	782	532
St. Marys Cement Inc.	410	314
Prestige Gunite Inc.	111	79
Prestige Materials	158	146
Brazilian Segment		
Companhia de Cimento Ribeirão Grande	111	206
Engemix S.A.	76	76
Mineração Potilider Ltda.	14	36
CJ Mineração Ltda.	16	16
Pedreira Pedra Negra Ltda.	4	12
Other	3	2
Other segments South America		
Cementos Artigas S.A.	13	11
	4,003	3,129
Aluminum		
Campos Novos Energia S.A.	57	57
Metalex Ltda.	49	49
Rio Verdinho Energia S.A.	29	29
Machadinho Energética S.A.	15	15
BAESA - Energética Barra Grande S.A.	7	7
	157	157
Steel		
Acergroup S.A.	149	149
Acerholding S.A.	27	28
Acerbrag S.A.	6	6
	182	183
Zinc and byproducts		
Compañía Minera Milpo S.A.	2,259	1,536
US Zinc Corporation	35	24
Votorantim Metais - Cajamarquilla S.A.	361	206
	2,655	1,766
Holding companies and other		
Votorantim Andina S.A.	16	16
	16	16
	7,013	5,251

(c) Impairment testing of goodwill

The Company and its subsidiaries evaluate at least annually the recoverability of the carrying value of the operating segment of CGU. The process of estimating these values involves the use of assumptions, judgments and estimates of future cash flows that represent the best estimate of the Company.

The Company's management determined the budgeted gross margin based on past performance and its expectations of market development. The discount rates used are pre-tax and reflect specific risks related to the operating segment or the CGU being tested.

These calculations use cash flow projections, before income tax and social contributions, based on financial budgets approved by management for a five-year period. Cash flow that exceeds the five-year period is extrapolated using the estimated growth rates. The growth rate does not exceed the average long-term growth rate of the operating sector of each segment.

The calculations of the value-in-use were based on the discounted cash flow model and are based on market assumptions.

Losses from impairment on intangible assets and goodwill as at December 31, 2015, amounted to R$ 237 (2014 - R$ 51), recorded in "Other operating income (expenses), net" (Note 28).

The amount of the impairment refers to: a) goodwill of investees Companhia de Cimento Ribeirão Grande in the amount of R$ 95, Pedreira Pedra Negra of $ 7, Mineração Potilider Ltda. of R$ 22; and China operations of R$ 113, b) provision amounting to R$ 3 of Barcarena unit, according to the expectations and future projections c) provision of R$ 0.2 of VCEAA in Spain and India.

All amounts in millions of reais unless otherwise stated

20 Borrowing

(a) Breakdown

Type	Average annual charges (i)	Current (v) 2015	2014	Non-current 2015	2014	Total 2015	2014
Local currency							
Debentures	110.66% CDI	631	176	4,723	5,832	5,354	6,008
BNDES	TJLP + 2.64% / 4.57% fixed rate BRL / SELIC + 2.47%	668	714	1,400	1,786	2,068	2,500
Export credit notes (ii)	8.00% fixed rate BRL	131	1	100	230	231	231
Development promotion agency	7.46% fixed rate BRL / TJLP + 1.22%	10	7	219	67	229	74
FINAME	4.84% fixed rate BRL / TJLP + 2.60%	32	29	143	163	175	192
Other		11	17	18	19	29	36
		1,483	944	6,603	8,097	8,086	9,041
Foreign currency							
Eurobonds - USD	6.39% fixed rate USD	123	87	9,510	6,738	9,633	6,825
Eurobonds - EUR	3.36% fixed rate EUR	85	76	4,837	3,047	4,922	3,123
Loans - Resolution 4131 (iii)	LIBOR USD + 1.25% / 3.02% fixed rate USD	8	2	3,393	1,284	3,401	1,286
Export prepayments (iv)	LIBOR USD + 1.25%	(3)	126	2,335	2,170	2,332	2,296
Syndicated loan/bilateral agreements	LIBOR USD + 0.85% / EURIBOR + 0.90% / 5.82% fixed rate	2	3	659	579	661	582
Working capital	DTF + 4.88% / 9.50% fixed rate INR / Hibor + 1.25% / 90.71% PBoC	633	84			633	84
BNDES	UMBNDES + 2.41%	233	169	399	400	632	569
Development promotion agency	LIBOR USD + 1.38%	31	21	158	128	189	149
Other		21	18	21	30	42	48
		1,133	586	21,312	14,376	22,445	14,962
		2,616	1,530	27,915	22,473	30,531	24,003

	2015	2014
Interest on borrowing	393	369
Current portion of long-term borrowing	1,606	1,114
Short-term borrowing	617	47
	2,616	1,530

(i) The average annual charges are presented only for agreements that represent a large share of the total debt amount.
(ii) The export credit notes entered into by the subsidiary CBA have swaps linked to them, resulting in a final cost of 88% of the CDI.
(iii) The transactions carried out by the Company and its subsidiaries VCSA and VS, under Law 4,131, have swaps linked to them, resulting in a final cost of 103% of the CDI.
(iv) The export prepayment carried out by the subsidiary VGmbH has swaps linked to it, which resulted in a final cost at a fixed rate in USD of 2.56% per year.
(v) The negative balances refer to borrowing costs.

BOB	– Boliviano
BNDES	– National Bank for Economic and Social Development.
BRL	– Brazilian Currency (Real).
CDI	– Interbank Deposit Certificate.
DTF	– Time Deposit Rate (Colombia).
EUR	– European Union currency (Euro).
EURIBOR	– Euro Interbank Offered Rate.
FINAME	– Government Agency for Machinery and Equipment Financing.
INR	– Indian Rupee.
Hibor	– *Hong Kong Interbank Offered Rate*.
PBoC	– *People's Bank of China*.
LIBOR	– London Interbank Offered Rate.
TND	– Turkish Dinar.
TJLP	– Long-term interest rate set by the National Monetary Council. The TJLP is the BNDES basic cost of financing.
UMBNDES	– Monetary unit of the BNDES reflecting the weighted basket of currencies of foreign currency debt obligations. At December 31, 2015, 99.3% of the basket comprised US Dollars.
USD	– US Dollar.
SELIC	– *Sistema Especial de Liquidação e Custódia* (Special System for Clearance and Custody).

All amounts in millions of reais unless otherwise stated

The maturity profile of borrowing as at December 31, 2015, was as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	As from 2025	Total
Local currency											
Debentures	631	101	1,311	1,416	1,325	400	160	3	3	4	5,354
BNDES	668	524	408	251	73	50	30	17	17	30	2,068
Export credit notes	131	100									231
Development promotion agency	10	30	31	31	31	31	23	22	19	1	229
FINAME	32	29	23	22	21	20	18	10			175
Other	11	7	8	3							29
	1,483	791	1,781	1,723	1,450	501	231	52	39	35	8,086
	18.34%	9.78%	22.03%	21.31%	17.93%	6.20%	2.86%	0.64%	0.48%	0.43%	100.00%
Foreign currency											
Eurobonds - USD (i)	123	(3)	(3)	804	374	936	(2)	1,349	1,561	4,494	9,633
Eurobonds - EUR (i)	85	(10)	(10)	(10)	(10)	2,756	2,121				4,922
Loans - Resolution 4131 (i)	8	390	675	784	1,544						3,401
Export prepayments (i)	(3)	192	1,169	974							2,332
Syndicated loans/bilateral agreement	2	426	2	15	133	17	17	17	17	15	661
Working capital	633										633
BNDES	233	184	132	69	11	2	1				632
Development promotion agency	31	29	29	29	29	21	13	8			189
Other	21	4	2	1	1	1	1	1	6	4	42
	1,133	1,212	1,996	2,666	2,082	3,733	2,151	1,375	1,584	4,513	22,445
	5.05%	5.40%	8.89%	11.88%	9.28%	16.63%	9.58%	6.13%	7.06%	20.10%	100.00%
Total	2,616	2,003	3,777	4,389	3,532	4,234	2,382	1,427	1,623	4,548	30,531
	8.57%	6.56%	12.37%	14.38%	11.57%	13.87%	7.80%	4.67%	5.32%	14.89%	100.00%

(i) The negative balances refer to borrowing costs amortized on a straight-line basis.

All amounts in millions of reais unless otherwise stated

(b) Changes

	2015	2014
Opening balance	24,003	23,435
New borrowing	7,270	8,383
Foreign exchange gains (losses)	6,491	1,317
Interest	1,782	1,578
Reclassification of liabilities related to assets held-for-sale	417	
Fair value adjustment - Resolution 4131	10	
Addition of borrowing fees, net of amortization	(28)	(52)
Payments - interest	(1,838)	(1,563)
Payments - principal	(7,576)	(9,095)
Closing balance	30,531	24,003

(c) Breakdown by currency

	Current		Non-current		Total	
	2015	2014	2015	2014	2015	2014
US Dollar	224	283	15,631	10,683	15,855	10,966
Real	1,483	944	6,603	8,097	8,086	9,041
Euro	85	76	5,261	3,369	5,346	3,445
Currency basket	182	137	277	298	459	435
Chinese Yuan	399				399	
Hong Kong Dollar	131				131	
Bolivian			117		117	
Indian Rupee	51	37			51	
Other	61	53	26	26	87	116
	2,616	1,530	27,915	22,473	30,531	24,003

(d) Breakdown by index

	Current		Non-current		Total	
	2015	2014	2015	2014	2015	2014
Local currency						
CDI	631	176	4,723	5,832	5,354	6,008
TJLP	612	668	1,329	1,689	1,941	2,357
Fixed rate	233	100	491	571	724	671
Selic	7		60	5	67	5
	1,483	944	6,603	8,097	8,086	9,041
Foreign currency						
Fixed rate	283	221	14,901	9,822	15,184	10,043
LIBOR	34	149	5,588	3,832	5,622	3,981
UMBNDES	233	169	399	400	632	569
EURIBOR			424	322	424	322
PBoC	399				399	
HIBOR	131				131	
Other	53	47			53	47
	1,133	586	21,312	14,376	22,445	14,962
	2,616	1,530	27,915	22,473	30,531	24,003

(e) Collateral

At December 31, 2015, R$ 9,902 (December 31, 2014 – R$ 7,879) of the balance of the Company's borrowing was collateralized under promissory notes and sureties and R$ 175 (December 31, 2014 - R$ 192) of the property, plant and equipment items were collateralized by liens on the financed assets.

(f) Covenants/financial ratios

Certain borrowing agreements are subject to compliance with financial ratio rules ("covenants"), such as: (i) gearing ratio (net debt/adjusted EBITDA), (ii) capitalization ratio (total debt/(total debt + equity) or equity/total assets), (iii) interest coverage ratio (cash + adjusted EBITDA/(interest + short-term debt). When applicable, these obligations are standard for all borrowing agreements.

The Company was in compliance with all of these covenants, as applicable.

(g) New borrowing

By means of new borrowing transactions and the early repayment of certain existing debts, the Company has sought to extend the average maturity profile of its borrowing as well as to balance the exposure of its borrowing to different currencies.

The main new borrowing transactions carried out were as follows:

(i) In February 2015, the Company entered into agreements in accordance with Law number 4,131, with a total value of USD 184 million. The Company settled in advance USD 11 million relating to these loans, renegotiated the costs of the swaps linked to these loans to 103.5% of the CDI, and extended the maturity to February 2018.

(ii) In April 2015 the subsidiary VS signed contracts in accordance with Law 4,131, with a value of USD 145 million, maturing in April 2020. After performing swaps, these transactions resulted in a final cost of 107. 8% of the CDI. These borrowings were used for the early redemption of the first public issue of debentures, amounting to R$ 450.

(iii) In May 2015 the Company completed its third public issue of simple, non-convertible, non-privileged, unsecured debentures. The debentures were distributed through restricted placement efforts and exempt from registration with the Brazilian Securities Commission (“CVM”), pursuant to Article 6 of CVM Instruction 476, of January 16, 2009. The issue amounts to R$ 550, with final maturity in May 2022 and pays 109.4% of the CDI. The proceeds raised were used to amortize the first and second public issues of the Company’s debentures in the amount of R$ 950.

(iv) In May 2015 the subsidiary VCSA issued bonds in US Dollars in the amount of EUR 500 million, with maturity in 2022 and an annual coupon of 3.50% p.a.. The issue was made in the international market without guarantees and is rated BBB, Baa3 and BBB by the rating agencies S&P, Moody’s and Fitch, respectively. Part of the proceeds from this issue was used, in September 2015, to amortize make-whole bonds with final maturity in 2017 and an annual coupon of 5.25% p.a. amounting to EUR 303.5 million. This transaction resulted in the payment of a premium amounting to R$ 98 (EUR 28 million), recognized as an expense in financial results (Note 29).

(v) In May 2015 the Company signed contracts in accordance with Law 4,131, with a value of USD 50 million, maturing in May 2020. After performing swaps, these transactions resulted in a final cost of 108.7% of the CDI. These borrowings were used for the early redemption of part of the first and second public issues of debentures, amounting to R$ 950.

(vi) In August and September 2015, VCSA signed contracts in accordance with Law No. 4,131, with a value of USD 200 million, maturing in 2019 and 2020. After conducting swaps, the operation resulted in a final cost 102.7% of CDI. Part of the proceeds of this issue was used for the early redemption of the fourth public issue of debentures, totaling R$ 500, that had final maturity in 2018 and a cost of 111% of the CDI.

(vii) In September 2015, VCSA negotiated the contractual terms of a loan in accordance with Law No. 4131, amounting to USD 200 million. VCSA renegotiated the cost of the swaps linked to the operation to 97.9% of CDI and extended the final maturity from October 2018 to October 2020.

All amounts in millions of reais unless otherwise stated

(viii) In October 2015, the subsidiary VCNA hired a new Revolving Credit Facility amounting to USD 230 million with a term of availability of five years. This Revolving Credit Facility is an additional source of liquidity and can be used at any time during the contract period. The operation replaced the USD 300 million line contracted in 2010 and added in 2014. On December 31, 2015, the use of the line position was USD 30 million.

(ix) In November 2015, the subsidiary Itacamba contracted a syndicated loan of BOB 835 million (R$ 1,467) maturing in 2025 in a syndicate of six local banks. The funds will be used to finance the expansion of a local cement plant. Since the contract, there was a release of BOL 209 million (R$ 367). The loan is 50% guaranteed by the Company until the startup of the project, with the guarantee then replaced by the assets acquired.

(x) In December 2015, the subsidiary VCSA completed its eighth public issue of simple, non-convertible, non-privileged, unsecured debentures. The debentures were distributed through restricted placement efforts and exempt from registration with the CVM, pursuant to Article 6 of CVM Instruction 476, of January 16, 2009. The issue amounts to R$ 750, with final maturity in September 2020 and pays 109.8% of the CDI. Part of the proceeds raised was used for the partial amortization of the fifth public issue of the Company's debentures in the amount of R$ 500.

(xi) During the year ended December 31, 2015, the Company's subsidiaries received R$ 335 from BNDES (December 31, 2014 - R $ 411) to fund their expansion and modernization projects, including purchase of machinery and equipment at, the main average cost of TJLP + 2.48% per year (December 31, 2014 - TJLP + 2.76% per year).

(xii) During the year ended December 31, 2015, the subsidiary VCNNE contracted transactions with Banco da Amazônia with a value of R$ 118 to finance expansion projects at cost 7% per year.

(h) Fair value of borrowing

	2015	
	Carrying amount	Fair value
Local currency		
Debentures	5,354	4,998
BNDES	2,068	1,710
Export credit notes	231	216
Development promotion agency	229	158
FINAME	175	119
Other	29	30
	8,086	7,231
Foreign currency		
Eurobonds - USD	9,633	8,157
Eurobonds - EUR	4,922	3,543
Loans - Resolution 4131 (i)	3,401	3,399
Export prepayments	2,332	2,417
Syndicated loans/bilateral agreement	661	721
Working capital	633	635
BNDES	632	660
Development promotion agency	189	196
Other	42	44
	22,445	19,772
	30,531	27,003

(i) The borrowing of this modality relates to compound financial instruments contracted as a single product with the financial institution (USD borrowing + CDI BRL rate swaps). The terms and conditions of the loan and derivative instrument are configured as a combined operation, so that the resulting cost is a debt adjusted by a percentage of the CDI in BRL. The difference in the measurement between the two instruments (loan at amortized cost vs. derivative instrument at fair value), creates an accounting mismatch in the income statement. To eliminate this accounting mismatch, the derivative instrument was designated for hedge accounting under "fair value", with the effect of this hedge as the measurement of the debt at fair value through profit or loss, as described in Note 2.18.

All amounts in millions of reais unless otherwise stated

In August and September 2015 the Company contracted the amount of USD 200 million in this modality, as described in Note 20 (g) (vii), relating to compound financial instruments measured by fair value.

21 Current and deferred income tax and social contribution

The Company and its subsidiaries use the taxable income method, and calculate and record their income tax and social contribution based on the effective rates at the end of the reporting period. Deferred income tax and social contribution tax assets arise from tax losses and temporary differences related substantially to (a) the effect of foreign exchange gains (losses) (tax calculated on a cash basis for loans); (b) adjustment of derivatives to their fair values; (c) temporarily non-deductible provision; (d) investments in rural activities; (e) temporary differences arising from the adoption of CPCs.

(a) Reconciliation of the income tax and social contribution expenses

The current amounts are calculated based on the current rates levied on taxable income, adjusted upwards or downwards by the respective additions and exclusions.

The income tax and social contribution amounts presented in the statements of income for the years ended December 31 are reconciled to their Brazilian standard rates as follows:

	2015	2014
Profit before income tax and social contribution	1,364	2,059
Standard rates	34%	34%
Income tax and social contribution at standard rates	(464)	(700)
Adjustments for the calculation of income tax and social contribution at effective rates		
Equity in the results of investees	105	88
Differences in the tax rates of foreign subsidiaries	66	124
Tax incentive	46	20
Tax on mining operations	(33)	(38)
Impairment of goodwill without deferred constitution	(38)	
Income tax and social contribution losses without recording the deferred amounts	(177)	282
Deferred tax and social contribution expenses reversal	(237)	(99)
Other additions, net	(240)	(59)
Income tax and social contribution calculated	(972)	(382)
Current	(714)	(531)
Deferred	(258)	149
Income tax and social contribution expenses	(972)	(382)

All amounts in millions of reais unless otherwise stated

(b) Breakdown of deferred tax balances

	2015	2014
Tax losses	2,091	2,173
Tax credits on temporary differences		
Foreign exchange gains	2,544	829
Tax, civil and labor provisions	489	592
Provision for losses on investments	200	339
Use of public assets ("UBP")	183	189
CPC 25 – "Decommissioning"	127	103
Provision for inventory losses	126	131
CPC 29 - "Biological assets"	58	43
Derivatives Law No. 11,051 / 04	31	51
Environmental liabilities	17	7
Provision for asset disposals	33	9
Tax benefit on goodwill	4	54
Other	321	223
Tax debits on temporary differences		
Market value adjustments to property, plant and equipment	(1,760)	(1,300)
Accelerated depreciation and adjustment of useful lives	(1,428)	(1,668)
Financial instruments - firm commitment	(300)	(326)
Goodwill amortization	(329)	(325)
CPC 20 - "Capitalized interest"	(148)	(26)
Deferred gains on derivative contracts	(134)	(137)
CPC 12 - "Adjustment to present value"	(56)	(46)
Pension funds	(40)	(42)
Borrowing costs	(7)	(11)
CPC 25 – "Decommissioning"	(5)	(18)
Other	(13)	(152)
Net	2,004	692
Net deferred tax assets related to the same legal entity	4,065	2,205
Net deferred tax liabilities related to the same legal entity	(1,989)	(1,513)

(c) Effects of deferred income tax and social contribution on the profit for the year and comprehensive income

	2015	2014
Opening balance	692	518
Effects on results for the year	(258)	149
Offset of tax losses		(562)
Reclassifications anticipation of income tax / social contribution		(2)
Deferred income tax and social contribution on hedge accounting	1,771	452
Effects of foreign exchange variation and other components of comprehensive income	(306)	12
Other	105	125
Closing balance	2,004	692

(d) Realization of deferred income tax and social contribution on tax losses

	2015	Percentage
In 2016	205	10%
In 2017	165	8%
In 2018	445	21%
In 2019	656	31%
After 2019	620	30%
	2,091	100%

All amounts in millions of reais unless otherwise stated

(e) Transition Tax Regime ("RTT")

On January 1 2015, Law 12,973/14 became effective, its adoption being mandatory. From 2015, it is necessary in the creation of sub-accounts to record the positive and negative differences between the measurement of the assets according to corporate law and the measurement of the assets in accordance with existing accounting policies in December 31, 2007 (the "RTT"), so that the tax effects of these adjustments is given as the realization of these assets.

22 Other liabilities

	2015	2014
Deferred revenue - performance obligation (i)	989	905
Provision for services	209	210
Advances fromthe sale of Sirama investment	142	
Environmental obligations	139	150
Provision for utilities - water, electric energy and gas	134	46
Long-term trade payables	133	112
Non-current advances from customers	102	23
Financial instruments - firm commitment (ii)	83	
Payables for acquisition of interests (iii)	69	249
Compensation for customers	40	29
"REFIS" - Tax Recovery Program	38	48
Provision for freight	29	50
Provision for maintenance	24	21
Long-term taxes payable	16	15
Unappropriated premiums	4	11
Other liabilities	161	65
	2,312	1,934
Current	(958)	(624)
Non-current	1,354	1,310

(i) In December 2014, the Company, through its subsidiary Votener, assigned to a financial institution the receivables up to December 2019 arising from certain contracts on the Electrical Energy Sale Agreements in the Regulated Environment ("CCEARs") equivalent to R$ 1,253, without any right of subrogation or co-obligation by the Company. For the assignment of the receivables, the Company received a total amount of R$ 905 and interest in advance will be recognized pro rata in relation to the income over the term of the contract.

In May 2015 the subsidiary Votener carried out a second assignment of receivables, without any right of subrogation or co-obligation by the Company, in the amount of R$ 368. For the assignment of receivables, the Company received a total amount of R$ 251 and interest in advance will be recognized pro-rata in relation to the income over the term of the contract.

On December 31, 2015, the updated balance amounted to R$ 989.

(ii) The subsidiaries CBA and VS, through firm commitment, performed electrical energy purchases for their consumption need until December 2020. These transactions resulted in a surplus of energy, which were recognized at fair value. In the year ended December 31, 2015, the recognition of the fair value was R$ 83, recorded in the income statement as "Other operational income (expenses), net" (Note 28).

(iii) In March 31, 2015, the Company reclassified an amount of R$ 108 to "Assets and liabilities classified as held-for-sale" that relates to payables from the acquisition of Silcar investments.

All amounts in millions of reais unless otherwise stated

23 Provision

The changes in the provision for asset retirement obligations and legal claims are as follows:

							2015	2014
			Legal claims					
	ARO (i)	Restructuring	Tax	Labor	Civil	Other	Total	Total
Opening balance	865	19	710	126	136	54	1,910	2,020
Present value adjustment	40						40	27
Additions	12		127	126	67	3	335	240
Reversals			(248)	(49)	(11)	(5)	(313)	(339)
Judicial deposits, net of write-offs			(7)	(13)	16		(4)	(20)
Settlements	(22)		(127)	(30)	(51)	(3)	(233)	(173)
Transfers			1				1	
Reclassification of liabilities held-for-sale	27		15				42	
Monetary restatement			116	19	15	2	152	199
Foreign exchange gains (losses)	182	1	8	1	1	11	204	35
Revision of estimated cash flow	55						55	(79)
Closing balance	1,159	20	595	180	173	62	2,189	1,910

(i) Asset retirement obligation.

All amounts in millions of reais unless otherwise stated

(a) Asset retirement obligation

The calculation of asset retirement obligations involves judgment about certain assumptions. In environmental terms, they refer to the future obligation to restore the ecological conditions similar to those existing before the beginning of the project or activity, or to carry out compensatory measures, agreed upon with the applicable bodies, as a result of the impossibility of returning the areas to the pre-existing condition. These obligations arise from the beginning of the environmental degradation of the area occupied by the operation or from formal commitments made to the environmental body, under which the degradation must be compensated. The dismantling and removal of an asset from an operation occurs when it is permanently retired, through the interruption of its activities, or by its sale or disposal.

Since these are long-term obligations, they are adjusted to the present value at the current interest rate and periodically restated based on the inflation rate. The interest rate used in 2015 was 6.68% p.a. (2014 – 4.23% p.a.). The recognized liability is periodically adjusted based on these discount rates plus inflation for the reference period.

At December 31, 2015, the 2015 interest rate forecast was increased to 7.51% (2014 – 6.68 p.a.), resulting in an R$ 101 (2014 – R$ 79) increase in liabilities, recognized as a balancing item to assets.

(b) Provision for tax, civil, labor and other contingencies

The Company and its subsidiaries are parties to tax, labor, civil and environmental and other litigation in progress and are discussing these matters at both the administrative and judicial levels. These matters are backed by judicial deposits where applicable.

The provision for losses regarded as probable arising from contingent liabilities is recorded in the books. Contingent liabilities classified as possible losses are not recorded in the books and are only disclosed in the notes to the financial statements. Contingent liabilities classified as remotely likely losses are neither accrued nor disclosed, except when, due to the visibility of the lawsuit, the Company considers their disclosure justified.

The amounts of contingencies are periodically estimated and updated. The classification of losses as possible, probable or remotely likely is supported by the advice of the Company's legal counsel.

The provision and the corresponding judicial deposits are as follows:

	2015			2014		
	Judicial deposits	Provision	Net amount	Judicial deposits	Provision	Net amount
Tax	(509)	1,104	595	(502)	1,212	710
Labor	(77)	257	180	(64)	189	126
Civil	(12)	185	173	(28)	164	136
Other		62	62		54	54
	(598)	1,608	1,010	(594)	1,619	1,026

(c) Outstanding judicial deposits

At December 31, 2015, the Company had judicial deposits with the courts in relation to proceedings classified by its legal advisors as having a possible or remote possibility of loss, in the amounts stated below. Given their classification, no provision was made:

All amounts in millions of reais unless otherwise stated

	2015	2014
Tax	219	249
Civil	86	109
Labor	39	32
Other	5	31
	349	421

(d) Comments on provisions with likelihood of loss considered probable

(i) Provision for tax contingencies

The tax proceedings with a probable likelihood of loss relate to discussions of federal, state and municipal taxes. The tax obligations that the Company is challenging in court on legal or constitutional grounds are fully recorded, irrespective of the likelihood of a favorable outcome to the litigation.

(ii) Provision for labor contingencies

VID and its subsidiaries are party to 6,283 labor lawsuits filed by former employees, third parties and labor unions, mostly claiming the payment of indemnities on dismissals, health hazard premiums and hazardous duty premiums, overtime, and commuting hours, as well as indemnity claims by former employees and third parties based on alleged occupational illnesses, work accidents, property damage and pain and suffering, in the common courts, arising under the terms of Constitutional Amendment 45 and the need to comply with normative clauses.

(iii) Provision for civil contingencies

The Company and its subsidiaries are parties to civil lawsuits involving claims for compensation for property damage and pain and suffering, collection and execution, and administrative claims.

(iv) Provision for environmental contingencies

The Company and its subsidiaries are subject to laws and regulations in the various countries in which they operate. The Company has established environmental policies and procedures to comply with environmental and other laws. Management performs analyses on a regular basis to identify environmental risks and to ensure that the systems in place are adequate to manage these risks.

The environmental litigation to which the Company and its subsidiaries are parties basically relate to public civil claims and citizens' lawsuits, whose objects include the interruption of the environmental licensing of new projects, and the recovery of areas of permanent preservation, among other matters.

(e) Litigation with likelihood of loss considered possible

The Company and its subsidiaries are party to other litigation involving a risk of possible loss, as detailed below:

All amounts in millions of reais unless otherwise stated

	2015	2014
Civil	6,766	6,067
Tax	4,983	4,230
Enviromental	539	484
Labor and social security	429	244
	12,717	11,025

(e.1) Comments on contingent tax and public rights liabilities with likelihood of loss considered possible

The contingent liabilities relating to tax lawsuits in progress with a likelihood of loss considered possible, for which no provision has been recorded, are commented on below. In the table below we present the materiality of these lawsuits:

Nature	2015	2014
Compensation for exploration for mineral resources (i)	476	512
Disallowances of PIS/COFINS credits (ii)	367	297
Offset of tax loss – 30% limit (merger) (iii)	250	230
ICMS transfer costs (iv)	206	200
Requirement of ICMS on Distribution System Usage Tariff (vi)	199	169
IRPJ/CSLL – Profits abroad (vii)	155	140
Disallowance of IRPJ negative balance (viii)	155	112
Tax assessment notice – IRPJ/CSLL (v)	154	189
Other lawsuits of individual amounts lower than R$ 100	3,021	2,381
	4,983	4,230

(i) Compensation for exploration for mineral resources

The subsidiaries VCSA, VMSA, VMZ and CBA have received various tax assessment notices issued by the National Department of Mineral Production for alleged failure to pay or underpayment of Financial Compensation for the Exploration of Mineral Resources, for the periods 1991 to 2012, January 1991 to December 2000, January 1991 to December 2006, 1991 to 2003 and 2013, respectively. At December 31, 2015, the amount subject to litigation totaled R$ 476 and was considered a possible loss.

(ii) Disallowances of PIS/COFINS credits

The Company's subsidiaries VMSA and CBA have received various court decisions relating to the disallowance of PIS and COFINS credits on items applied during the production process, which in the Federal Revenue of Brazil's understanding would not entitle them to credits. The restated amount at December 31, 2015 was R$ 367. The lawsuits are currently pending decisions in the lower administrative court.

(iii) Offset of tax loss – 30% limit (merger)

The subsidiary VE was assessed by the Federal Revenue of Brazil, as the successor to the company VBC Participações S.A., due to the supposedly incorrect offsetting of tax losses without complying with the 30% limit (merger). The lawsuit is pending the judgment of the voluntary appeal by the Administrative Board of Tax Appeals. The amount involved at December 31, 2015 was R$ 250.

(iv) ICMS – Transfer costs

The subsidiary VMSA was assessed for alleged failure to pay ICMS on transfers of nickel carbonate to its branch located in the State of São Paulo, relating to the periods from January 2003 to December 2003, April 2014 to March 2005, April 2005 to March 2006, April 2006 to March 2007 and April

2007 to March 2008. These assessments totaled R$206 at December 31, 2015. Currently the lawsuits are pending a decision in the administrative or judicial courts.

(v) **Tax assessment notice – IRPJ/CSLL**

In December 2011, the subsidiary VCSA was assessed by the Federal Revenue of Brazil in the amount of R$ 184 for alleged failure to pay or underpayment of IRPJ and CSLL relating to the period from 2006 to 2010, due to: (i) the amortization of goodwill supposedly being incorrect; (ii) the utilization of tax loss above the 30% limit permitted by the tax regulation (merger); and (iii) failure to pay IRPJ and CSLL obligations due on a monthly estimate basis. At December 31, 2015, of the total restated amount of R$ 258 the subsidiary understood that the best estimate of possible contingency was only R$ 154. In the lower court judgment, the judges decided on the reduction of the assessed amount by approximately R$ 50. In March 2015, there was a trial of the mandatory and voluntary appeal by the Board of Tax Appeals, where the exclusion of the qualified and isolated fines and also the confirmation of the decision of the first instance was decided, which relates to the decision above. Currently, the subsidiary is awaiting the judgment of the mandatory and special appeal presented to the responsible agent.

(vi) **Requirement of ICMS on Distribution System Usage Tariff**

The subsidiaries VMZ, CBA and VS received collection notices for alleged ICMS debts on the Distribution System Usage Tariff. The total restated amount of these was R$ 199 at December 31, 2015. Currently the lawsuit involving VMZ is awaiting judgment by the Taxpayers Board of Minas Gerais, the lawsuit involving CBA has already been judged favorably to the Company, and an appeal may be filed by the State Finance Department. In December 2015, VMZ obtained a favorable final decision before the Supreme Court recognizing the non-levy of ICMS on the Distribution System Usage Tariff. At VS, two lawsuits have had favorable decisions in the lower court and await decisions on the appeal of the Minas Gerais State Finance Department, and one lawsuit is pending a decision of the lower court.

(vii) **IRPJ/CSLL – profits abroad**

In November 2013, the Company was assessed by the Federal Revenue of Brazil for alleged failure to pay IRPJ and CSLL on profits earned abroad in the calendar year 2011. The amount involved at December 31, 2015 was R$ 22, and the likelihood of loss is classified as possible. Currently, the Company awaits the judgment of the appeal of the National Treasury, by the Board of Tax Appeals.

In October 2013, VCSA was assessed by the Federal Revenue of Brazil in the amount of R$ 107, for alleged failure to pay IRPJ and CSLL on profits earned abroad in calendar years 2008 to 2010, through its subsidiaries and associates. At the lower court, the judges decided that the tax assessment notice was valid. Currently, the subsidiary is awaiting a decision on the voluntary appeal filed with the Administrative Board of Tax Appeals. At December 31, 2015, the amount under litigation was R$ 133, considered a possible loss.

(viii) **Disallowance of IRPJ negative balance**

The Company, its subsidiary CBA and Cia. Nitroquímica Brasileira Ltda. ("CNBQ"), sold by the Company to third parties, received court decisions related to the disallowance of an IRPJ negative balance in the calendar years 2006 (VID), 2003, 2004, 2006 (CNBQ) and 2008 (CBA), totaling a restated amount of R$ 155 at December 31, 2015. Currently, the lawsuits are pending judgment on the manifestation of dissatisfaction filed by the companies. The responsibility for any liability of CNBQ, in accordance with the company purchase and sale agreement, rests with the Company.

(e.2) Comments on contingent labor liabilities with likelihood of loss considered possible

Labor claims with a likelihood of loss considered possible include those filed by former employees, third parties and labor unions, mostly claiming the payment of indemnities on dismissals, health hazard premiums and hazardous duty premiums, overtime and commuting hours, as well as indemnity claims by former employees and third parties based on alleged occupational illnesses and work accidents.

All amounts in millions of reais unless otherwise stated

(e.3) Comments on contingent civil liabilities with likelihood of loss considered possible

The contingent liabilities relating to civil lawsuits in progress with a likelihood of loss considered possible, for which no provision has been recorded, are commented on below. In the table below we present the materiality of these lawsuits:

Nature	2015	2014
Public civil suit - Violation of the economic order (i)	3,309	3,013
Administrative investigations carried out by the SDE (ii)	1,919	666
Indemnity lawsuits (iii)	270	493
Arbitration – Petrolina Aggregates Operation (iv)	317	285
Litigation with a São Paulo transportation company (v)	168	166
Litigation with a Northeast transportation company (vi)		86
Litigation in Brasília (vii)	46	43
Other lawsuits	737	1,315
	6,766	6,067

(i) Public civil suit – violation of the economic order

The Office of the Public Prosecutor of the State of Rio Grande do Norte has filed a civil class action against the subsidiary VCSA, together with eight other defendants, including several of Brazil's largest cement manufacturers, alleging cartel formation, and demanding that: (1) the defendants make an indemnity payment, jointly, amounting to R$ 5,600, in favor of the civil class action, due to moral and collective damage; (2) the defendants make payment of 10.0% of the total amount paid by the consumers for the acquisition of cement or concrete under the brands held by the defendants during the period from 2002 until 2006, due to individual consumers damage; (3) the defendants be subject to the following penalties according to Articles 23, Section I and Article 24 of Law nº 8.884/94: (i) in addition to the payments mentioned in item (1), a fine ranging from 1.0% to 30.0% of annual revenue after the deduction of taxes relating to the fiscal year immediately preceding the year in which the alleged violation occurred, but not less than the monetary advantage acquired; and (ii) a prohibition, for a period not shorter than five years, against obtaining financing support from governmental financial institutions or participating in bidding processes held by the federal, state or municipal governments and their associated entities. Because the current claims mentioned in item (1), amounts to R$ 5,600 and the civil class action alleges joint liability, VCSA has estimated that, based on its market share, its share of the liability would be approximately R$ 2,400. However, there can be no assurance that this apportionment would prevail, or that VCSA will not be held liable for a different portion, which could be larger, or for the entire amount of this claim. Additionally, there is no assurance that VCSA will not be held liable for other amounts in relation to indemnifications for consumer damage as mentioned in item (2) above and/or the fine mentioned in item (3) above.

There has been no relevant decision regarding this lawsuit. The expectation of loss in relation to this matter is considered possible, and no provision has been established for this claim. At December 31, 2015, the amount subject to litigation was R$ 3,309.

(ii) Administrative investigations carried out by the Secretariat of Economic Law ("SDE"), current General Superintendence of the Administrative Council for Economic Defense ("CADE")

In 2003 the SDE, the current General Superintendence of CADE, initiated administrative proceedings against the largest concrete producing Brazilian cement companies, including the subsidiary VCSA. These proceedings relate to allegations by certain ready-mix concrete producers that the large cement companies may have breached Brazilian antitrust laws by not selling certain types of cement to ready-mix concrete companies. In March of 2015 the introductory phase of this legal process was reopened. However, to date there is no indication that the General Superintendence will forward any recommendation to the CADE court, regarding conducting a future investigation in this regard. In the Company's opinion, and that of its legal advisors, VCSA will not be subjected to any administrative or criminal penalties. The prospect of loss is considered remote.

Additionally, in 2006 the SDE, currently the General Superintendence of CADE, initiated administrative proceedings against the Cement Industry Union, some industry associations (cement and concrete), the largest Brazilian cement companies, including VCSA, and some executives. On January 22, 2014, CADE initiated a trial in relation to the lawsuit initiated in 2006 by SDE, with four of its five counselors voting in favor of certain penalties. On May 28, 2014, after suspending the first trial session, CADE issued its final decision on the administrative proceeding, imposing certain penalties on six cement Brazilian companies, including VCSA, due to the alleged anti-competitive practices. The parties submitted Declaration Embargoes, CADE's last administrative appeal, which were judged on July 29, 2015, reaching the final terms of the sentence.

The penalties imposed by CADE on VCSA include the payment of a fine amounting to R$ 1,566 and the obligation to sell (1) all its interests, minority or otherwise, in other companies operating in the cement or concrete markets in Brazil; (2) 20% of the Company's assets from concrete producing activities in Brazil, which shall be sold in relevant markets in which there is more than one concrete producing company owned or possessed by the Company; (3) other cement assets (of which VCSA has not yet been informed) which, in CADE's opinion, were directly related to the alleged illegal acts / crimes that VCSA is being accused of. Other non-monetary sanctions were also imposed, including (1) the mandatory disclosure of CADE's decision in one of the five biggest Brazilian periodicals; (2) the prohibition to hire official financial institutions, in the case of credit lines with financing conditions subsidized by public resources, made available by such institutions; (3) a restriction on financing provided by Brazilian government, as well as the recommendation to limit other benefits and tax incentives. The updated balance related to this lawsuit at December 31, 2015, amounted R$ 1,919.

In November 2015, VCSA filed an annulment action to cancel the decision issued at the administrative level or, at least, reduce the applied penalties. The injunction was granted in November 24, 2015, to suspend the effects of the decision issued by CADE at the administrative level, preventing CADE from demanding fulfillment of obligations and/or executing the penalties until the new judgment. At the moment, the presentation of CADE's defense is awaited. The Company considered the likelihood of loss in this lawsuit as possible.

(iii) **Indemnity lawsuits**

A further indemnity lawsuit has been filed against VMZ, alleging property damage and pain and suffering. VMZ has filed its defense and is awaiting judgment. The restated amount involved as at December 31, 2015 was R$ 34.

A lawsuit has been filed against VMZ, currently being subject to expert examination. The claims relate to differences regarding the provision of services. The restated amount involved as at December 31, 2015 was R$ 16.

Trial is being awaited in regard to a lawsuit filed against the subsidiary VMZ. The demand discusses differences arising from the provision of services. The amount involved, updated as at December 31, 2015 was R$ 17.

An indemnity lawsuit has been filed against the subsidiary VMSA claiming compensation for the alleged rescission of an agreement. The case is pending the delivery of judgment. The restated amount involved as at December 31, 2015 was R$ 105.

An indemnity lawsuit has been filed against VMSA alleging the rescission of an agreement. This lawsuit is in the fact-finding phase. The restated amount involved as at December 31, 2015 was R$ 63.

An indemnity lawsuit has been filed against VMSA, alleging the rescission of an agreement. It is currently in the initial phase. In view of the procedural phase and the elements raised so far, it is not possible to estimate the amount subject to litigation (December 2015).

An indemnity lawsuit has been filed against the subsidiary CBA arising from a contractual relationship. After receiving the complaint, CBA filed its defense, which totally refuted the claim. The court proceedings are in the expert witness phase. The amount involved in the lawsuit as at December 31, 2015 totaled R$ 33.

(iv) **Arbitration – Petrolina Aggregates Operation**

This refers to an arbitration proceeding filed with the Centro das Indústrias do Estado de São Paulo ("CIESP")/Federação das Indústrias do Estado de São Paulo ("FIESP") Conciliation, Mediation and Arbitration Chamber, initiated in January 2014, which discussed the sale of shares of the companies São Francisco Zeta and Petrolina Zeta to Pedreira Pedra Negra, and the sellers' obligation to engage in a new business in Palmas (TO), which afterward would be sold to Pedra Negra. The Claimants request (i) the rescission of the agreement entered into by the parties, even if partially; and (ii) that Pedra Negra be sentenced to pay compensation for damages and pain and suffering. Pedra Negra, on the other hand, requests: (i) that the sellers be sentenced to buy back the shares held by shareholders P-z and SF-z and pay the amounts agreed with the Defendant in the Agreement for the Acquisition of São Francisco Zeta and Petrolina Zeta Shares, or alternatively (ii) the termination of the agreements by exclusive fault of the sellers, and that the sellers be sentenced to return the amounts disbursed by Pedra Negra under such agreements, duly adjusted for inflation; and (iii) that the sellers be sentenced to pay compensation for damages related to the nonperformance of the agreements entered into by the parties. The expectation of loss under this matter is considered possible, and the Company has not established any provision for this claim. At December 31, 2015, the amount under litigation was R$ 317.

(v) **Litigation with a transportation company in São Paulo**

In September 2003, a transportation company filed a claim against Votorantim Cimentos Brasil S.A. ("VCB", a company merged into the subsidiary VCSA) seeking compensation for material damages amounting to R$84 and moral damages at an unspecified value, alleging that the Company failed to perform two oral contracts. The transportation company argues that those breaches caused the discontinuation of the activities of its sales department and significant losses to its transportation area. The Company presented its response in September 2009, arguing that: (1) the statute of limitations had expired; (2) the Company did not change the general conditions of the reverse repurchase agreement; and (3) the transportation company mismanaged its business and caused its own insolvency. In August 2011, the Court rejected the argument of the expiration of the statute of limitations and determined the expert examination, as requested by the parties. The expert examination was concluded and the report was presented. The parties filed their challenges to the report and the lawsuit was sent to the expert for his opinion. In June 2014, clarifications were provided by the expert. On June 24, 2014, the Company's challenge was presented. In December 2014 the Company received a decision declaring the end of the fact-finding phase and requesting the parties to declare if they would be interested in holding a conciliation hearing. On December 31, 2015, the updated balance related to this lawsuit was R$ 168, considered as possible.

(vi) **Litigation with a transportation company in the northeast**

In August of 2010, a transportation company filed an indemnity lawsuit against the subsidiary VCNNE seeking compensation for damages amounting to R$ 125, claiming that VCNNE had not complied with the minimum established volume in the cement transportation contract signed by both parties. VCNNE was named in this lawsuit in March of 2011.VCNNE lodged its response, claiming that there was no written agreement in relation to the minimum claimed volume, and claiming relative incompetence such as that the service interruptions and eventual losses incurred by the transportation company, were the result of bad management and did not have any relation to VCNNE. The transportation company then presented its reply. On January 22, 2013, the court published its decision, accepting the Company's appeal and transferring this case to a Civil Court, at Recife-PE. In November 2013, the court gave the transportation company resource's provision to confirm that the judgment from Sao Luis-MA was competent enough to judge this suit. VCNNE appealed from this decision. In April 2014, the appeal was admitted and against the expedition in regard was opposed to declaration embargo from the transportation company, which was contested by VCNNE. On June 17, 2014, a decision was issued, rejecting the declaration embargos. In September 2014, the instruction and judgment hearing took place. In November 2014, the decision was issued taking into consideration the imposed declaration embargos, to supply the pointed omission and considering the production request of accounting evidence to overrule it. In December 2014, the retained grievance against the decision was brought, which dismissed the production request of accounting evidence. In March 2015, a decision was made imposing a penalty of R$ 95. On March 30, 2015, declaration embargos were opposed by VCNNE, and in May 2015, these were judged to be unfounded. On May 26, 2015, VCNNE appealed this decision, and in June 2015, the parties traded under the payment of R$ 11 by VCNNE and the transportation company, and the lawsuit was closed.

(vii) **Litigation in Brasília**

In 2005, the subsidiary VS was fined in an administrative proceeding by the Secretariat of Economic Law. Due to its conviction of the inconsistency of the fine, the subsidiary filed an annulment action, which is in progress in Brasília. Based on the outside legal advisors' opinion, the claim is classified as possible. If the subsidiary loses the action, it will have to comply with the requirements of the CADE decision published and refrain from the conduct specified therein, and pay the fine applied which, restated through December 31, 2015, was R$ 46. The original amount of the fine, of R$23, is guaranteed by a bank guarantee provided in 2006, monetarily restated and with an indeterminate period. The Company is awaiting analysis of the requests for clarification submitted, after pronouncement of sentence.

(e.4) Comments on contingent environmental liabilities with likelihood of loss considered possible

The environmental litigation to which the Company and its subsidiaries are party basically relate to public civil actions, class actions and indemnity lawsuits, the objectives of which are the interruption of the environmental licensing of new projects, the recovery of areas of permanent preservation, and the decontamination of land, among other matters. The cost of the preparation of environmental studies and the cost of the recovery of the Company's and its subsidiaries' land in the event of an unfavorable outcome are estimated as the need arises. These costs are recorded as expenses in the statement of income as they are incurred. The current possible demands relate basically to indemnity lawsuits. The Company has filed its defense, which fully contests the allegations. All environmental lawsuits with material amounts and that are classified as possible losses are in the fact-finding phase. There has been no provision recorded in relation to environmental lawsuits in progress.

(f) Commitments

The subsidiaries VCSA and VCNNE own a lot of contracts for the acquisition of goods used in the cement production, partially replacing the clinker. These are contracts with thermal plants for coal ashes, with steel mills for blast furnace slag and with iron alloys producers for metallurgical slag. The maturities vary from contract to contract, the longest ending in 2035.

To complement the electric power supply that arises from own hydroelectric plants, the subsidiaries VCSA and VCNNE have-long term purchase contracts with third parties, ensuring its energy necessity.

The subsidiary VCEAA holds petroleum coke purchase agreements with Total Oil maturing in 2017 and with Repsol Cosmos and VCT for the period 2016 to 2018. In addition, it has freight contracts with Daichi, Noble and Cargill for the period 2016 to 2017.

All amounts in millions of reais unless otherwise stated

24 Use of public assets

The Company invests in companies that have concession contracts in the electrical energy industry. Most of these contracts provide for annual payments from the commencement of operations and are adjusted by the General Market Price Index for the use of public assets.

The contracts have an average duration of 35 years, and the amounts to be paid annually are as follows:

							2015		2014
Plants/Companies	Investor	Concession start date	Concession end date	Payment start date	Ownership interest	Intangible assets (Note 19)	Liabilities	Intangible assets (Note 19)	Liabilities
Salto Pilão	Companhia Brasileira de Alumínio	nov-01	dec-36	jan-10	60%	214	488	224	437
Enercan - Campos Novos	Companhia Brasileira de Alumínio	apr-00	may-35	jun-06	33%	5		4	
Salto do Rio Verdinho	Companhia Brasileira de Alumínio	aug-02	sep-37	oct-10	100%	9	19	9	17
Itupararanga	Companhia Brasileira de Alumínio	nov-03	dec-23	jan-04	100%	1	2	1	2
Piraju	Companhia Brasileira de Alumínio	dec-98	jan-34	feb-03	100%	1	6	1	6
Ourinhos	Companhia Brasileira de Alumínio	jul-00	aug-35	sep-05	100%	1	5	1	4
Baesa - Energética Barra Grande	Companhia Brasileira de Alumínio	jun-01	may-36	jun-07	15%	15	41	16	38
Capim Branco I e Capim Branco II	Votorantim Metais Zinco S.A.	aug-01	sep-36	oct-07	13%	3	10	3	9
Picada	Votorantim Metais Zinco S.A.	may-01	jun-36	jul-06	100%	20	65	21	59
Enercan - Campos Novos	Votorantim Metais S.A.	apr-00	may-35	jun-06	12%	1	12	1	11
Pedra do Cavalo	Votorantim Cimentos N/NE S.A.	mar-02	apr-37	apr-06	100%	130	477	138	435
						400	1,125	419	1,018
Current							(61)		(64)
Non-current						400	1,064	419	954

All amounts in millions of reais unless otherwise stated

25 Equity

(a) Share capital

On December 31, 2015, the fully subscribed and paid up capital of the Company was R$ 21,419 (2014 – R$ 20,363), consisting of 17,814,608 thousand common shares (2014 – 17,782,851 thousand common shares).

At the Extraordinary General Meeting held on September 8, 2015, VPAR increased the Company's capital by R$ 120, through the issuance of 66,912,011 (sixty six million, nine hundred and twelve thousand and eleven) new common shares, through local currency.

On October 21, 2015, according to the minutes of the Extraordinary General Meeting, VPAR approved the increase of the Company's capital by R$ 936, through the issuance of 397,269,038 (three hundred ninety-seven million, two hundred and sixty-nine thousand and thirty-eight) new common shares, due to the conversion of the third private issuance of convertible debentures. These debentures were fully subscribed by Votorantim Finanças S.A. ("VFIN"), however they were transferred to VPAR via payment of additional dividends.

(b) Dividends

Dividends are calculated based on 25% of profit for the year, net of a legal reserve, pursuant to the Company's bylaws.

The calculation of dividends, at December 31, was as follows:

	2015	2014
Profit for the year - attributable to the owners of the Company	387	1,588
Legal reserve	(19)	(80)
Dividend calculation basis	368	1,508
Mandatory minimum dividends	(92)	(379)
Additional dividends		(402)
	(92)	(781)
Percentage on profit for the year	25%	52%

During the year 2015, the Company paid R$ 318 to its parent company VPAR, relating to mandatory dividends regarding the fiscal year 2014 approved at the Ordinary General Meeting ("AGO") (dated April 30, 2015).

During the year 2014, the Company paid R$ 504 to VPAR, R$ 102 relating to mandatory dividends regarding the fiscal year 2013 approved at the AGO (dated April 30, 2014), and R$ 402 to interim dividends for prior years approved at the Extraordinary General Meeting ("AGE") (dated January 17, 2014 and November 26, 2014).

(c) Legal reserve and profit retention reserve

The legal reserve is credited annually with 5% of the profit for the year and cannot exceed 20% of the share capital. The reserve can only be used to increase capital and offset accumulated losses.

The profit retention reserve was established to record the appropriation of the remaining balance of retained earnings, held over to fund projected business growth, as established in the Company's investment plan.

All amounts in millions of reais unless otherwise stated

(d) Reserve for tax incentives

This reserve was set up in accordance with Article 195-A of the Brazilian Corporation Law (amended by Law 11,638/07), and it is credited with the benefits of tax incentives, which are recognized in the results of operations for the year and appropriated to the reserve from retained earnings. These incentives are not included in the calculation basis for the minimum mandatory dividend.

(e) Carrying value adjustments

The Company recognizes in this account the effects of foreign exchange gains/losses on direct and indirect investments abroad. The cumulative effect will be transferred to the statement of income for the year as a gain or loss upon the sale or write-off of the investment.

This account also includes: foreign exchange gains/losses on debts and derivatives designated to mitigate risks related to foreign exchange, commodities prices and interest rate (hedge accounting), actuarial gains and losses on pension plans, and the amount relating to the fair value of available-for-sale financial assets.

26 Net revenue

(a) Reconciliation of revenue

	2015	2014
Gross revenue		
Sales of products - domestic market	18,493	18,736
Sales of products - foreign market	14,879	11,261
Supply of electric energy	3,072	2,508
Service revenue	876	1,186
	37,320	33,691
Taxes on sales and services and other deductions	(5,799)	(5,369)
Net revenue	31,521	28,322

(b) Information on geographical areas in which the Company operates

The geographical areas are determined based on the location of the customers. The net revenue of the Company, classified by currency and destination, is as follows:

All amounts in millions of reais unless otherwise stated

(i) Revenue by destination

	2015	2014
Brazil	16,927	17,200
United States	3,878	2,514
Peru	1,787	1,684
Argentina	1,146	754
Colombia	1,080	913
Canada	994	787
Switzerland	791	318
Turkey	739	614
Spain	511	389
China	390	372
Morocco	389	298
Uruguay	336	287
Luxembourg	322	275
Netherlands	312	200
Singapore	247	143
Tunisia	239	244
India	195	167
Japan	194	202
Chile	181	100
South Korea	171	84
Belgium	108	119
Other countries	584	658
	31,521	28,322

(ii) Revenue by currency

	2015	2014
Real	16,638	17,030
US Dollar	9,151	6,805
Argentinian Peso	1,059	698
Canadian Dollar	991	783
Colombian Peso	930	795
Euro	905	405
Turkish Lira	658	559
Dirham	389	298
Dinar	238	243
Other currencies	562	706
	31,521	28,322

27 Expenses by nature

The Company's management discloses expenses by function, and also the cost of sales, selling and administrative expenses, as follows:

All amounts in millions of reais unless otherwise stated

	2015	2014
Raw materials, inputs and consumables	16,916	14,933
Employee benefit expenses	4,644	4,087
Depreciation, amortization and depletion	2,754	2,302
Outsourced services	1,833	1,217
Transportation expenses	1,279	1,353
Other expenses	213	725
	27,639	24,617
Reconciliation		
Cost of products sold and services rendered	23,532	20,586
Selling expenses	1,835	1,858
General and administrative expenses	2,272	2,173
Total cost of sales, selling and administrative expenses	27,639	24,617

28 Other operating income (expenses), net

	2015	2014
Impairment of fixed and intangible assets	(652)	(596)
Realization of financial instrument - firm commitment (i)	(326)	
Spending in not activatable projects	(161)	(69)
Financial instruments - firm commitment	(83)	1,294
Expenses on environmental obligations	(39)	(41)
Provision for impairment - advances to suppliers	(6)	(25)
Net gain on co-processing	11	24
Recovery of taxes	35	21
Revenue from rents and leases	62	47
Gain (loss) on sale of investments (ii)	265	(1)
Mark-to-market of embedded derivatives - Fibria call option		(126)
Other taxes		(51)
Other expenses, net	77	(85)
	(817)	392

(i) The realization of the financial instrument is recorded against the sales revenue, in accordance with the physical delivery of energy (Note 15).

(ii) Relates mainly to the net gain on the sale of investment in subsidiary Silcar amounting to R$ 238, the net gain in the sale of investment that VCNA held in Hutton Transport Limited and the remeasurement of the 25% remaining stake amounting to R$ 24.

All amounts in millions of reais unless otherwise stated

29 Finance results, net

	2015	2014
Finance income		
Derivative financial instruments (i)	785	46
Income from financial investments	586	374
Interest on financial assets	157	131
Update on monetary assets	137	85
Interest on related-party transactions (Note 14)	56	46
Discounts obtained	30	66
Fair value of borrowings	14	
Other finance income	157	165
	1,922	913
Finance costs		
Interest on borrowing	(1,814)	(1,584)
Capitalization of borrowing costs – CPC 20	87	33
Derivative financial instruments	(268)	(153)
Monetary restatement of provisions	(217)	(225)
Interest and monetary restatement - Use of public assets	(145)	(85)
Income tax on remittances of interest abroad	(141)	(156)
Premium paid on repurchase of bonds	(136)	(527)
Adjustments to monetary restatments on tax credits - Summer Plan	(76)	
Interest on anticipation of receivables	(72)	
Discounts granted	(46)	(129)
Interest on related-party transactions (Note 14)	(36)	(28)
Interest on anticipation of receivables	(13)	(51)
Other finance costs	(328)	(219)
	(3,205)	(3,124)
Foreign exchange and monetary losses, net	(729)	(85)
Finance results, net	(2,012)	(2,296)

(i) Relates mainly to the foreign exchange rate of the US Dollar in hedge operations. (Note 6.1.1).

30 Employee benefit expenses

	2015	2014
Salaries and bonuses	2,939	2,579
Payroll charges	1,103	1,016
Social benefits	602	492
	4,644	4,087

31 Pension plan and post-employment health care benefits

The Company's subsidiaries have a defined contribution plan for employees. Certain subsidiaries, however, have a defined benefit plan.

The table below shows where the balances and activities related to post-employment benefit are allocated in the consolidated financial statements.

All amounts in millions of reais unless otherwise stated

	2015	2014
Obligations recorded in the balance sheet with:		
Pension plan benefits	161	172
Supplementary pension plan benefits		27
Post-employment healthcare benefits	144	104
Liabilities recorded in the balance sheet	305	303
Expenses recognized in the statement of income with:		
Pension plan benefits	26	27
Post-employment healthcare benefits	10	8
	36	35
Remeasurement with:		
Pension plan benefits - gross amount	(42)	(31)
Deferred income tax and social contribution	17	13
Pension plan benefits - net amount	(25)	(18)

(a) Defined contribution pension plan

The Company and its Brazilian subsidiaries sponsor private pension plans available to all employees administered by Fundação Senador José Ermírio de Moraes ("FUNSEJEM"), a private, not for profit, pension fund. Under the terms of the regulations of the fund, the contributions of the employees to FUNSEJEM are matched by the sponsors in accordance with the level of remuneration of the employee. For employees whose remuneration is lower than the threshold established by the regulations, the Company matches the contributions that represent up to 1.5% of their monthly remuneration. For employees whose remuneration exceeds the threshold, the Company matches the contributions of employees that represent up to 6% of their monthly remuneration. Voluntary contributions can also be made to FUNSEJEM. Once the plan contributions are made, no additional contributions are required.

(b) Defined benefit pension plan

The Company has subsidiaries with defined pension plans in North America, South America and Europe, which follow similar regulatory standards. The defined benefit pension plans also offer health care and life insurance, among other benefits. The cost of the retirement benefits and the other benefits of the plan granted to employees are determined by the projected benefit method on a pro rata basis considering the length of service and the best expectations of management regarding the return on plan assets, salary adjustments, costs and mortality trends, and the age of retirement of employees.

The amounts recognized in the balance sheet are determined as follows:

	2015	2014
Present value of funded obligations	950	839
Fair value of plan assets	(866)	(701)
Deficit of funded plans	84	138
Present value of non-funded obligations	206	160
Total deficit of defined benefit pension plans	290	298
Impact of the minimum funding requirement/assets ceiling	15	5
Assets and liabilities in the balance sheet	305	303

The changes in the defined benefit obligation and the fair value of the plan assets during the year were as follows:

All amounts in millions of reais unless otherwise stated

	Present value of funded and unfunded obligations	Fair value of plan assets	Total	Impact of the minimum requirement of the funds/asset ceiling	Total 2015	Total 2014
At January 1, 2015	1,000	(701)	299	4	303	374
Current service cost	6		6		6	6
Finance cost (income)	62	(33)	29		29	27
Past service cost and curtailments	1		1		1	
	69	(33)	36		36	33
Re-measurements:						
Return on assets, excluding the amount included as finance income		(10)	(10)		(10)	(42)
Losses (gains) arising from changes in demographic assumptions	1		1		1	(52)
Losses (gains) arising from changes in financial assumptions	(61)		(61)		(61)	62
Losses arising from experience	15		15		15	3
Changes in the asset ceiling, excluding the amount included as finance cost				11	11	(1)
	(44)	(10)	(54)	11	(44)	(30)
Foreign exchange gains (losses)	211	(138)	73		73	(9)
Contributions:						
Employer	1	(30)	(29)		(29)	(32)
Payments of the plans:						
Payment of benefits	(54)	48	(6)		(6)	(33)
Assumed/(acquired) in a business combination	(28)		(28)		(28)	
At December 31, 2015	1,155	(864)	291	15	305	303

The defined benefit obligation and the plan assets, by country, are as follows:

												Percentual
						2015						2014
	Brazil	Europe	North America	South America	Colombia	Total	Brazil	Europe	North America	South America	Colombia	Total
Present value of the obligation	57	20	609	2	261	949	59	45	631	2	262	999
Fair value of plan assets	(71)	(5)	(663)		(128)	(867)	(64)	(3)	(521)		(113)	(701)
	(15)	15	(54)	2	133	82	(5)	42	110	2	149	298
Present value of non-financial obligations		49	158			207						
Impact of the minimum requirement of the funds/asset ceiling	13		3			16	5					5
	(2)	64	107	2	133	305		42	110	2	149	303

The actuarial assumptions used were the following:

						2015						2014
	Brazil	Europe	North America	South America	Colombia	Total	Brazil	Europe	North America	South America	Colombia	Total
Discount rate	15.3%	8.3%	4.3%	10.0%	9.0%	9.4%	11.2%	8.5%	4.0%	10.0%	7.0%	8.1%
Inflation rate	7.5%	2.3%	2.0%	11.5%		4.7%	5.2%	2.4%	2.0%	7.6%	3.0%	4.0%
Future salary increases	8.3%	6.3%	2.5%	3.0%		4.0%	6.3%	5.9%	2.5%	3.0%		3.5%
Increases in future pension plans	7.5%				3.5%	5.5%	5.2%				3.0%	4.1%

The assumptions relating to mortality experience are established based on the opinion of actuaries, in accordance with published statistics and the experience in each territory. The mortality assumptions for the most important countries are based on the following post-retirement mortality tables: (i) Brazil AT-2000 Basic segregated for gender and disability table RRB-1994, modified and aggravated by 15%, segregated by gender; (ii) Europe: CSO80 with a projection period of ten to 15 years; (iii) North America: RP- 2000 segregated by gender with a projection period of eight years and (IV) Colombia: Based on table RV8, regulated by resolution 115-2010, without an expiration period.

All amounts in millions of reais unless otherwise stated

The sensitivity of the defined benefit obligation to the changes in the main weighted assumptions is:

		Impact on the defined benefit obligation	
	Change in assumptions	Increase in assumptions	Decrease in assumptions
Discount rate	0.42%	4.9% decrease	4.5% decrease
Salary increase rate	0.42%	13.5% increase	7.2% increase
Pension increase rate	0.25%	1.7% increase	1.6% increase
		Increase by one year in the assumption	**Decrease by one year in the assumption**
Life expectancy		15.6% decrease	15.8% increase

The sensitivity analyses above are based on a change in the assumption while all other assumptions are kept constant. In practice, it is not probable that this will occur, and the changes in some of the assumptions can be correlated. In the calculation of the sensitivity of the defined benefit obligation in relation to the significant actuarial assumptions, the same method was applied (the present value of the defined benefit obligation calculated based on the projected unit credit method on the reporting date), as in the calculation of the pension plan obligation recognized in the balance sheet.

The methods and types of assumptions used in the preparation of the sensitivity analysis did not change as compared to the prior period.

(c) Post-employment benefits (pension and health care)

The Company operates post-employment health care plans through its subsidiary in North America, VCNA, and in Europe, VCEAA. The accounting method, assumptions and frequency of evaluations are similar to those used for the defined benefit pension plans. Most of these plans are not funded.

The obligations relating to these plans are included in the movement of the defined benefit obligations previously presented.

32 Tax benefits

The subsidiary VCSA and its subsidiaries have tax incentives, the most significant of which are related to:

(a) FDI - Ceará Industrial Development Fund - Sobral and Pecém - CE

The Ceará Industrial Development Fund (State Law 10,367 of December 7, 1979 and State Decree 29,183 of February 8, 2008), or the FDI Program, is a program created by the State of Ceará to attract industrial investments to the economy of the state. The FDI Program aims to encourage the implementation, functioning, relocation, enlargement and modernization, or recovery through tax and financial incentives. Under this program, the Company is entitled to the following tax benefits until September 2016 and July 2020, respectively: (i) deferral of ICMS on import of fixed assets and raw materials; and (ii) financing of 75% and 64% of the ICMS on sales of manufactured products, with the payment of 25% of this initial amount after 36 months.

(b) PSDI – Sergipe Industrial Development Program - Laranjeiras - SE

The Sergipe Industrial Development Program (State Law 3,140 of December 23, 1991), or PSDI, is an instrument to foster the socioeconomic development of the State through the concession of incentives and incentives for enterprises. In connection with this program, the Company is entitled to the following tax benefits until June 2016: (i) deferral of ICMS on import of raw materials to be used exclusively in our manufacturing process; and (ii) payment of only 8% of the incremental ICMS tax on additional sales of manufactured products.

(c) Pro-Indústria – Tocantins Industrial Development Program - Xambioá - TO

The Tocantins Industrial Development Program (State Law 1,385 of July 9, 2003), or Pro-Indústria, is a program created by the State of Tocantins aiming to foster the internalization of the industrial activity, the job and income creation, the encouragement to the use and transformation of the local raw material, the sustainable use of natural resources and the gradual exemption of the production by means of tax and financial benefits. In connection with this program, the Company requested and obtained on April 16, 2008 the application of a special regime under which the Company benefits from the following tax incentives until February 2023:

- Tax burden of 2.0% related to ICMS on sales of manufactured products;
- Exemption of ICMS from sales destined to member organs of the government, including autarchies and foundations maintained or established by the government and public economy companies of which control is owned by the State of Tocantins;
- Exemption from tax substitution of ICMS on goods or services to be used in the process of production, transformation or manipulation;
- Exemption from ICMS on import of raw materials (including semi-finished products or finished products for packaging) and fixed assets without similar assets in the State market to be used exclusively in our manufacturing process.

(d) PRODIC – Industrial, Commercial and Mineral Development Program of the State of Rondônia - Porto Velho - RO

The Industrial, Commercial and Mineral Development Program of the State of Rondônia (State Law 61, of July 21, 1992 and State Law 1,558, of December 26, 2005), or PRODIC, was created to foster the development, expansion and modernization of the State of Rondônia through tax and financial benefits. Under this program, the Company is entitled to the following tax incentives until May 2018: (i) presumed credit of 85% of the ICMS; (ii) deferral of ICMS on imports of raw materials without similar materials in the domestic market; and (iii) reduction of 50.0% in the tax base of the ICMS on purchases of electricity, interstate transportation and communication services.

(e) PRODEIC - Mato Grosso Industrial and Commercial Development Program – Nobres and Cuiabá, MT

The Mato Grosso Industrial and Commercial Development Program (State Law 7,958, of September 25, 2003 and State Decree 1,432, of September 29, 2003), or PRODEIC, is a program created by the State of Mato Grosso, and was created to foster the development the expansion, modernization, and diversification of the economic activities by stimulating investments, technological upgrading of production facilities, and the increase of the state's competitiveness, with emphasis on job creation and income generation, and the reduction of social and regional inequality. Under this program, the Company and its subsidiaries are entitled to the following tax benefits until August 2021 and May 2023, respectively: (i) deferral of ICMS on imports of fixed assets and raw materials; (ii) deferral of ICMS related to the tax rate difference levied on interstate acquisitions of fixed assets; and (iii) decrease of the tax base/deemed credit of 85.88% and 90% of ICMS on sales of manufactured products.

All amounts in millions of reais unless otherwise stated

(f) DESENVOLVE - Bahia Industrial Development and Economic Integration Program – Camaçari – BA

The Bahia Industrial Development and Economic Integration Program (State Law 7,980 of December 12, 2001 and State Decree 8,205 of April 03, 2002), or DESENVOLVE, is a program created to foster and diversify the industrial and agroindustrial equation, with the formation of industrial centers in the economic regions and integration of the productive chain essential to the social and economic development and to the job and income creation in the State, through tax and financial benefits.

The subsidiary VCSA is able to enjoy this benefit for 12 years, starting from January 1, 2013, in the production of concrete mass and mortar, and considering this program, the benefits are:

- Deferred recognition and payment of ICMS on importations and on acquisition into this State and other units of the Federation, relatively to the rate difference, of goods destined to the fixed assets group, to the moment when the disembodiment takes place and;
- Extension of 72 months on the maturity of the ICMS due balance, related to its own operation, generated by the investments planned for the incentivized project.

33 Insurance

Pursuant to the Insurance Management Policy of the Company and its subsidiaries, different types of insurance policy, such as operational risk and civil liability insurance are contracted, to protect them against potential losses due to production stoppages, property damage and damage to third parties.

The Company and its subsidiaries have civil liability insurance for their operations and officers, with coverage and terms and conditions deemed adequate by management to cover the inherent risks.

The operational insurance coverage at December 31, 2015 was as follows:

Assets	Type of coverage	Coverage amount
Facilities, equipment and inventories	Property damage	56,954
	Loss of profits	11,280

34 Supplemental information – Business segments

In order to provide more detailed information the Company has elected to present financial information organized into two business segments. Each segment presented has been prepared following the accounting consolidation policies in note 22 and consider, first, the elimination of balances and transactions among the companies before: (i) eliminations between business segments; (ii) eliminations of investments held by the holding companies.

Additionally, the eliminations and reclassifications among the companies are presented so that the net results reconcile with the consolidated financial information of VID according to the supplementary information. This supplementary information is not intended to be in accordance with, and is not required by, the accounting practices adopted in Brazil, or by IFRS.

All amounts in millions of reais unless otherwise stated

(a) Balance sheet – business segments

								2015
	Cement	Aluminum	Nickel	Zinc & byproducts	Steel	Holding companies and other	Eliminations and reclassifications	Total consolidated
Assets								
Current assets								
Cash and cash equivalents, financial investments and derivative financial instruments	4,715	1,226	388	1,830	613	1,993		10,765
Trade receivables	1,461	398	70	310	412	420	(326)	2,745
Inventory	1,586	533	160	996	613			3,888
Taxes recoverable	533	61	211	378	132	61		1,376
Dividends receivable	12	27	7			625	(629)	42
Financial instruments - firm commitment		145				196		341
Other assets	430	38	14	152	78	55		767
	8,737	2,428	850	3,666	1,848	3,350	(955)	19,924
Assets classified as held-for-sale	414							414
Non-current assets								
Long-term receivables								
Financial investments and derivative financial instruments	334		8	9	147	300		798
Taxes recoverable	236	378	502	161	37	1		1,315
Related parties	113	2	572	4	25	4,250	(1,778)	3,188
Deferred income tax and social contribution	1,783	540		775	66	901		4,065
Judicial deposits	169	93	16	21	38	12		349
Financial instruments - firm commitment		476				151		627
Other assets	357	13	6	20	31	1	87	515
	2,992	1,502	1,104	990	344	5,616	(1,691)	10,857
Investments	1,276	662	118		96	30,754	(27,732)	5,174
Property, plant, equipment and biological assets	13,053	4,552	725	6,480	3,311	1,236		29,357
Intangible assets	6,934	587	238	8,446	298	72		16,575
	24,255	7,303	2,185	15,916	4,049	37,678	(29,423)	61,963
Total assets	33,406	9,731	3,035	19,582	5,897	41,028	(30,378)	82,301

All amounts in millions of reais unless otherwise stated

	Cement	Aluminum	Nickel	Zinc & byproducts	Steel	Holding companies and other	Eliminations and reclassifications	Total consolidated
								2015
Liabilities and equity								
Current liabilities								
Borrowing	1,881	263	21	145	229	77		2,616
Derivative financial instruments	201	50	16	87	49	73		476
Trade payables	1,701	291	215	1,486	464	293	(314)	4,136
Payables - trading	126							126
Salaries and payroll charges	429	89	66	148	101	85		918
Income tax and social contribution	83	4		3	21	58		169
Taxes payable	204	13	5	29	64	18		333
Dividends payable	169	10			1	197	(215)	162
Advances from customers	179	298		2	127	2	(366)	242
Other liabilities	370	100	3	57	63	285	141	1,019
	5,343	1,118	326	1,957	1,119	1,088	(754)	10,197
Liabilities related to assets held-for-sale								
Non-current liabilities								
Borrowing	17,616	3,039	73	3,919	914	2,354		27,915
Derivative financial instruments		2						2
Deferred income tax and social contribution	575	1		1,248	120	117		2,061
Related parties	169	687	79	132	565	1,139	(1,555)	1,216
Tax, civil, labor and other provisions	865	230	209	734	109	38	4	2,189
Other liabilities	824	577	32	159	280	1,202	(351)	2,723
	20,049	4,536	393	6,192	1,988	4,850	(1,902)	36,106
Total equity attributable to owners of the Company	7,330	4,077	2,316	7,788	2,701	35,090	(27,480)	31,822
Non-controlling interests	684			3,645	89		(242)	4,176
Total equity	8,014	4,077	2,316	11,433	2,790	35,090	(27,722)	35,998
Total liabilities and equity	33,406	9,731	3,035	19,582	5,897	41,028	(30,378)	82,301

All amounts in millions of reais unless otherwise stated

(b) Statement of income – business segments

	Cement	Aluminum	Nickel	Zinc & byproducts	Steel	Holding companies and other	Eliminations and reclassifications	Total consolidated 2015
Net revenue from products sold and services rendered	14,046	4,566	1,115	6,704	4,225	3,666	(2,801) (*)	31,521
Cost of products sold and services rendered	(10,083)	(3,633)	(1,043)	(5,142)	(3,330)	(3,102)	2,801 (*)	(23,532)
Gross profit	3,963	933	72	1,562	895	564		7,989
Operating income (expenses)								
Selling	(1,057)	(81)	(12)	(305)	(375)	(5)		(1,835)
General and administrative	(1,005)	(179)	(110)	(395)	(302)	(281)		(2,272)
Other operating income (expenses), net	247	(194)	(503)	(507)	(70)	343	(133)	(817)
	(1,815)	(454)	(625)	(1,207)	(747)	57	(133)	(4,924)
Operating profit (loss) before equity results and finance results	2,148	479	(553)	355	148	621	(133)	3,065
Result from equity investments								
Equity in the results of investees	202	94	12		12	(2,005)	1,996	311
Finance results, net								
Finance income	997	193	45	42	200	552	(107)	1,922
Finance costs	(1,922)	(486)	(77)	(179)	(198)	(450)	107	(3,205)
Foreign exchange gains (losses), net	(439)	(997)	(448)	(964)	(175)	(95)	2,389	(729)
	(1,364)	(1,290)	(480)	(1,101)	(173)	7	2,389	(2,012)
Profit (loss) before income tax and social contribution	986	(717)	(1,021)	(746)	(13)	(1,377)	4,252	1,364
Income tax and social contribution								
Current	(184)	(71)	(3)	(184)	(86)	(186)		(714)
Deferred	13	359	(237)	304	(52)	1	(646)	(258)
Profit (loss) for the period from continuing operations	815	(429)	(1,261)	(626)	(151)	(1,562)	3,606	392
Discontinued operations								
Loss for the period from discontinued operations	(10)							(10)
Profit (loss) for the period	805	(429)	(1,261)	(626)	(151)	(1,562)	3,606	382
Profit (loss) attributable to the owners of the Company	746	(429)	(1,261)	(540)	(155)	(1,562)	3,588	387
Profit (loss) attributable to non-controlling interests	59			(86)	4		18	(5)
Profit (loss) for the period	805	(429)	(1,261)	(626)	(151)	(1,562)	3,606	382

(*) Relates to the net revenue from electric energy operations (Votoner and Santa Cruz Energia).

All amounts in millions of reais unless otherwise stated

								2014
	Cement	**Aluminum**	**Nickel**	**Zinc & byproducts**	**Steel**	**Holding companies and other**	**Eliminations and reclassifications**	**Total consolidated**
Net revenue from products sold and services rendered	13,292	3,625	965	5,510	3,976	2,647	(1,693) (*)	28,322
Cost of products sold and services rendered	(8,810)	(2,826)	(850)	(4,050)	(3,144)	(2,599)	1,693 (*)	(20,586)
Gross profit	4,482	799	115	1,460	832	48		7,736
Operating income (expenses)								
Selling	(1,176)	(81)	(19)	(232)	(345)	(5)		(1,858)
General and administrative	(898)	(189)	(107)	(425)	(303)	(251)		(2,173)
Other operating income (expenses), net	237	182	(113)	(427)	56	491	(34)	392
	(1,837)	(88)	(239)	(1,084)	(592)	235	(34)	(3,639)
Operating profit (loss) before equity results and finance results	2,645	711	(124)	376	240	283	(34)	4,097
Result from equity investments								
Equity in the results of investees	188	29	(5)	(9)	29	1,131	(1,105)	258
Finance results, net								
Finance income	375	205	39	47	68	209	(30)	913
Finance costs	(1,699)	(512)	(44)	(164)	(178)	(557)	30	(3,124)
Foreign exchange gains (losses), net	(88)	(295)	(96)	(262)	(16)	672		(85)
	(1,412)	(602)	(101)	(379)	(126)	324		(2,296)
Profit (loss) before income tax and social contribution	1,421	138	(230)	(12)	143	1,738	(1,139)	2,059
Income tax and social contribution								
Current	(235)	(41)	(1)	(183)	(57)	(14)		(531)
Deferred	6	73	268	172	(2)	(368)		149
Profit (loss) for the period from continuing operations	1,192	170	37	(23)	84	1,356	(1,139)	1,677
Discontinued operations								
Loss for the period from discontinued operations	(4)							(4)
Profit (loss) for the period	1,188	170	37	(23)	84	1,356	(1,139)	1,673
Profit (loss) attributable to the owners of the Company	1,130	170	37	60	84	1,356	(1,249)	1,588
Profit (loss) attributable to non-controlling interests	58			(83)			110	85
Profit (loss) for the period	1,188	170	37	(23)	84	1,356	(1,139)	1,673

(*) Relates to the net revenue from electric energy operations (Votoner and Santa Cruz Energia).

All amounts in millions of reais unless otherwise stated

(c) Adjusted EBITDA – business segments

								2015
	Cement	Aluminum	Nickel	Zinc & byproducts	Steel	Holding companies and other	Eliminations and reclassifications	Total consolidated
Net revenue from products sold and services rendered	14,046	4,566	1,115	6,704	4,225	3,666	(2,801)	31,521
Cost of products sold and services rendered	(10,083)	(3,633)	(1,043)	(5,142)	(3,330)	(3,102)	2,801	(23,532)
Gross profit	3,963	933	72	1,562	895	564		7,989
Operating income (expenses)								
Selling	(1,057)	(81)	(12)	(305)	(375)	(5)		(1,835)
General and administrative	(1,005)	(179)	(110)	(395)	(302)	(281)		(2,272)
Other operating income (expenses), net	247	(194)	(503)	(507)	(70)	343	(133)	(817)
	(1,815)	(454)	(625)	(1,207)	(747)	57	(133)	(4,924)
Operating profit (loss) before equity investments and finance results	2,148	479	(553)	355	148	621	(133)	3,065
Plus:								
Depreciation, amortization and depletion - continuing operations	988	316	97	1,052	254	47		2,754
EBITDA	3,136	795	(456)	1,407	402	668	(133)	5,819
Plus:								
Dividends received	73	3			8	632		716
Exceptional items								
Impairment of fixed and intangible assets	252	2	359	36	3			652
Fair value of biological assets			1		44			45
Gain on sale of investments	(238)					(27)		(265)
Other	12		10	(2)	7			27
Adjusted EBITDA	3,235	800	(86)	1,441	464	1,273	(133)	6,994

All amounts in millions of reais unless otherwise stated

								2014
	Cement	Aluminum	Nickel	Zinc & byproducts	Steel	Holding companies and other	Eliminations and reclassifications	Total consolidated
Net revenue from products sold and services rendered	13,292	3,625	965	5,510	3,976	2,647	(1,693)	28,322
Cost of products sold and services rendered	(8,810)	(2,826)	(850)	(4,050)	(3,144)	(2,599)	1,693	(20,586)
Gross profit	4,482	799	115	1,460	832	48		7,736
Operating income (expenses)								
Selling	(1,176)	(81)	(19)	(232)	(345)	(5)		(1,858)
General and administrative	(898)	(189)	(107)	(425)	(303)	(251)		(2,173)
Other operating income (expenses), net	237	182	(113)	(427)	56	491	(34)	392
	(1,837)	(88)	(239)	(1,084)	(592)	235	(34)	(3,639)
Operating profit (loss) before equity investments and finance results	2,645	711	(124)	376	240	283	(34)	4,097
Plus:								
Depreciation, amortization and depletion - continuing operations	816	308	83	795	254	46		2,302
EBITDA	3,461	1,019	(41)	1,171	494	329	(34)	6,399
Plus:								
Dividends received	51	5						56
Exceptional items								
Fibria call option						126		126
Impairment of goodwill	51							51
Fair value of biological assets					(32)			(32)
Provision for impairment of fixed and intangible assets	22	358	81	84				545
Gain on sales of investments					(34)		34	
Other	(36)	28						(8)
Adjusted EBITDA	3,549	1,410	40	1,255	428	455		7,137

All amounts in millions of reais unless otherwise stated

(d) Adjusted EBITDA

The table below reconciles the annualized adjusted EBITDA to Note 6.1. for the calculation of the gearing ratio:

	2015	2014
Profit for the year	382	1,673
Plus (less):		
Equity in the results of investees	(311)	(258)
Depreciation, amortization and depletion - continuing operations	2,754	2,302
Net financial income - continuing operations	2,012	2,295
Income and social contribution taxes - continuing operations	972	382
Net financial income - discontinued operations	9	
Depreciation, amortization and depletion - discontinued operations	1	
Income tax and social contribution - discontinued operations	(2)	
EBITDA	5,817	6,394
Plus:		
Dividends received	716	56
Extraordinary items		
EBITDA - discontinued operations	2	5
Impairment - property, plant, equipment	652	559
Fair value of biological assets	45	(32)
Reversal of impairment of PP&E	(265)	
Fibria call option		126
Other	27	29
Adjusted EBITDA	6,994	7,137

35 Events after the reporting period

(a) Incorporation of parent company VPAR

With the main objective of reflecting the most appropriate way its operations in all the segments, in January 1st 2016, the Company incorporated its parent company Votorantim Participações S.A. ("VPAR") and changed its name to Votorantim S.A. ("VSA"). This merger resulted in an increase, in the amount of R$ 7,254, of the Company's equity, represented substantially by investments in Citrosuco and Banco Votorantim, amounting to R$ 3,076 and R$ 4,523, respectively, which are still registered by the equity method. In this context, VSA succeeds VPAR in all its rights and obligations, including compliance with covenants of loan contracts and, when required, certain indexes are now calculated based on the financial statements of Votorantim S.A..

(b) Temporary suspension of the nickel business

After thorough analysis of several scenarios, which did not demonstrate economic viability in the short and medium term for the nickel business, on January 18, 2016 Votorantim Metais S.A. announced the temporary suspension, beginning in the months of February and May 2016, of the operations of Niquelândia and Sao Miguel Paulista units, respectively. The relevant accounting effects of this decision have already been recognized in 2015, as mentioned in item (ii) of Note 18 (a).

(c) Debentures early settlement

On January 7, 2016 VCSA performed a partial payment of its fifth issue of public debentures amounting to R$ 500.

(d) Capital increase

On February 2, 2016 at an Extraordinary General Meeting, the Company's management decided upon and approved a capital increase in VCSA amounting to R$ 1,000 by issuing 705,427,574 common shares, increasing the subsidiary's capital to R$ 3,730. The book value of the shares yet to be subscribed and integrated as part of this capital increase, calculated as of November, 2015, is R$ 1.42 reais per share.

(e) New 4131 borrowing

On February 2016, VCSA signed a contract according to resolution 4131 amounting to USD 100 million (R$ 404) with maturity to February 2020 with a cost of 103% of the CDI, after the swap takes place. This operation is guaranteed by subsidiary VCNA and the resources will be used for early settlement of debt.

(f) Extension of licenses for electricity generation

In June 2016, will be extended No. 304/98 concession contract for electricity generation between the Government and the CBA for exploiting the potential of hydropower generating plants called França, Fumaça, Barra, Porto Raso, Alecrim e Serraria located on the river Juquiá- Guaçu, State of São Paulo. In accordance to the regulatory framework of energy established by Law nº 10,848 / 04 and meeting the requirements set forth by OCPC 05 - Concession Contracts, the energy purchase and sale agreements for trading in the regulated market, signed / renewed from 2004 will be linked to the Use of public assets (onerous concession).